

FIG. 1

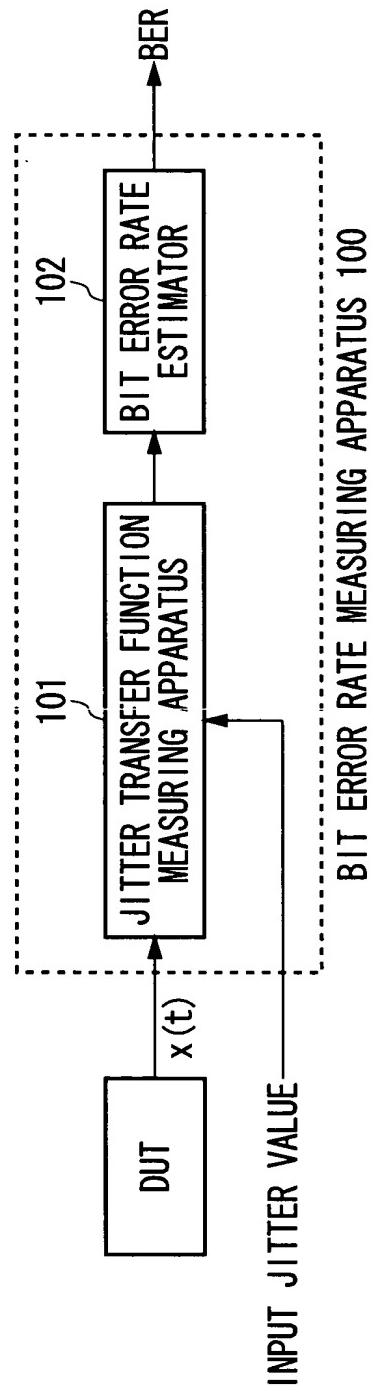


FIG. 2

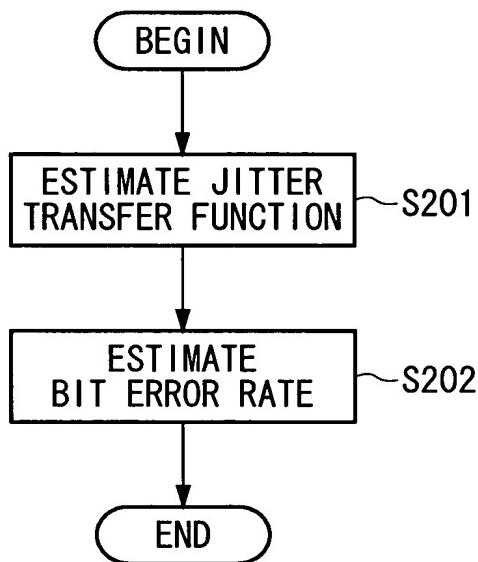


FIG. 3

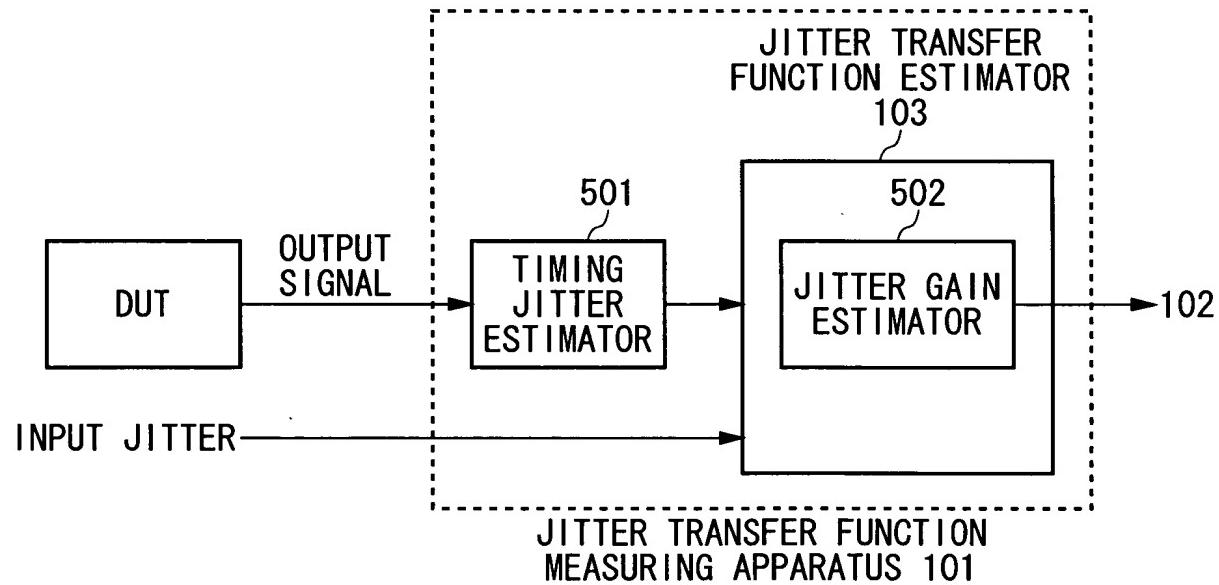


FIG. 4

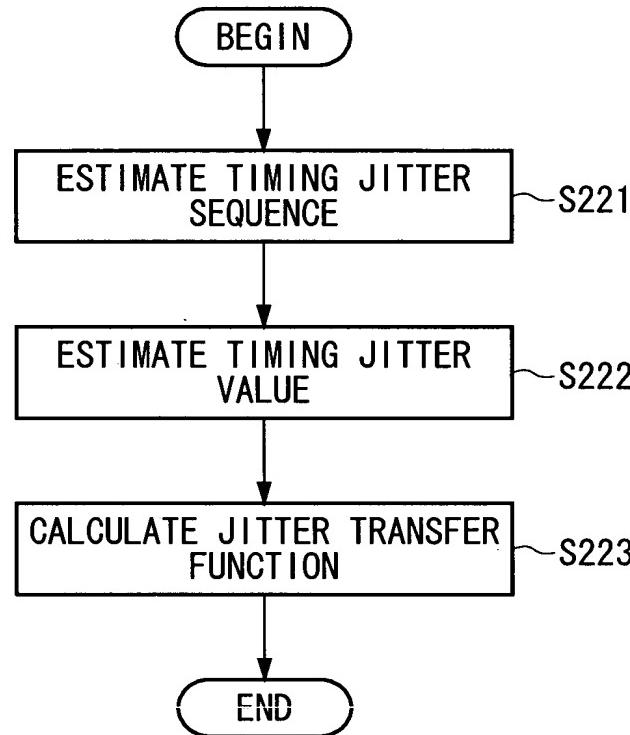


FIG. 5

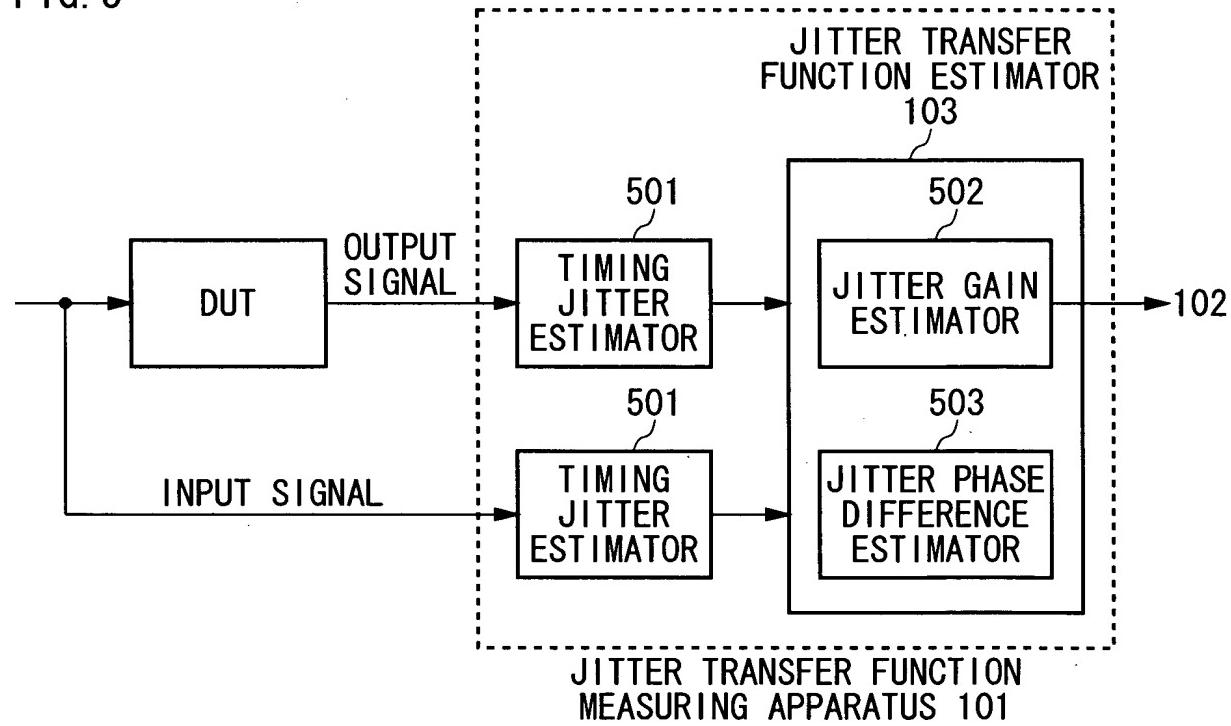


FIG. 6

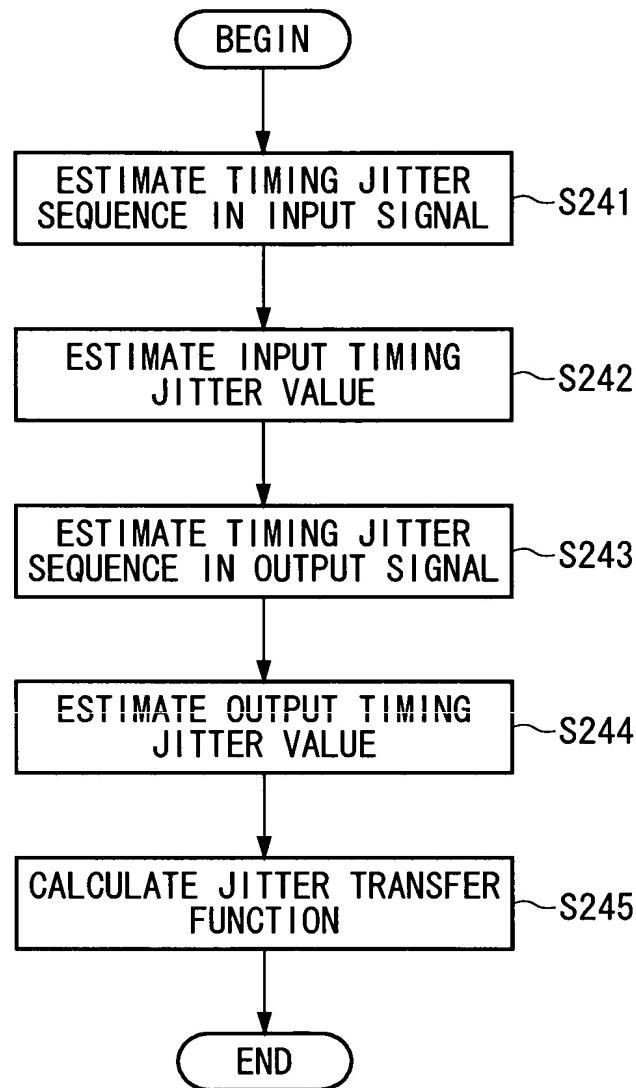


FIG. 7

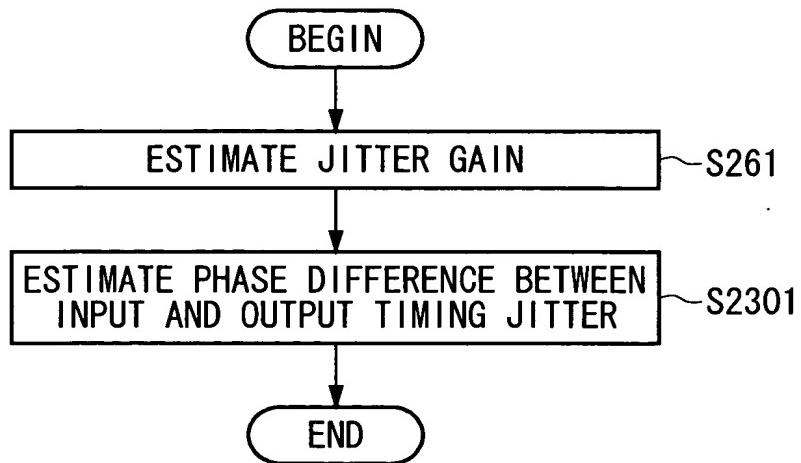


FIG. 8

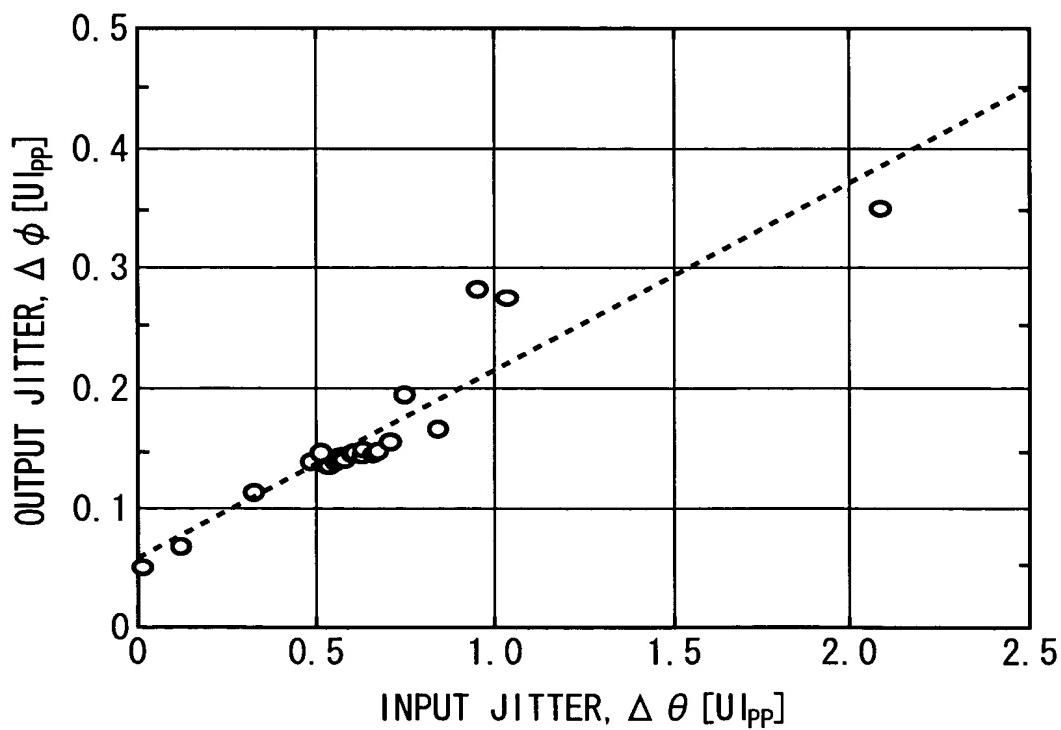


FIG. 9

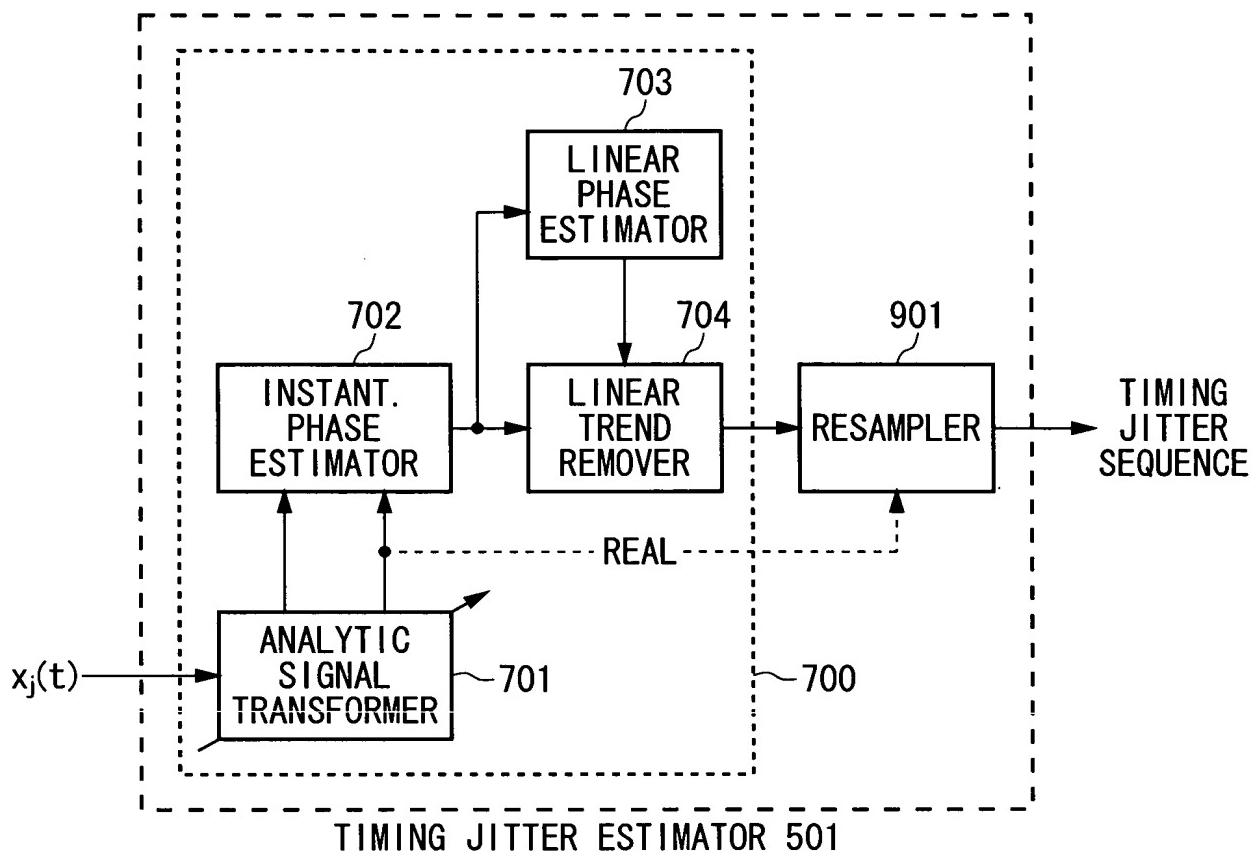


FIG. 10

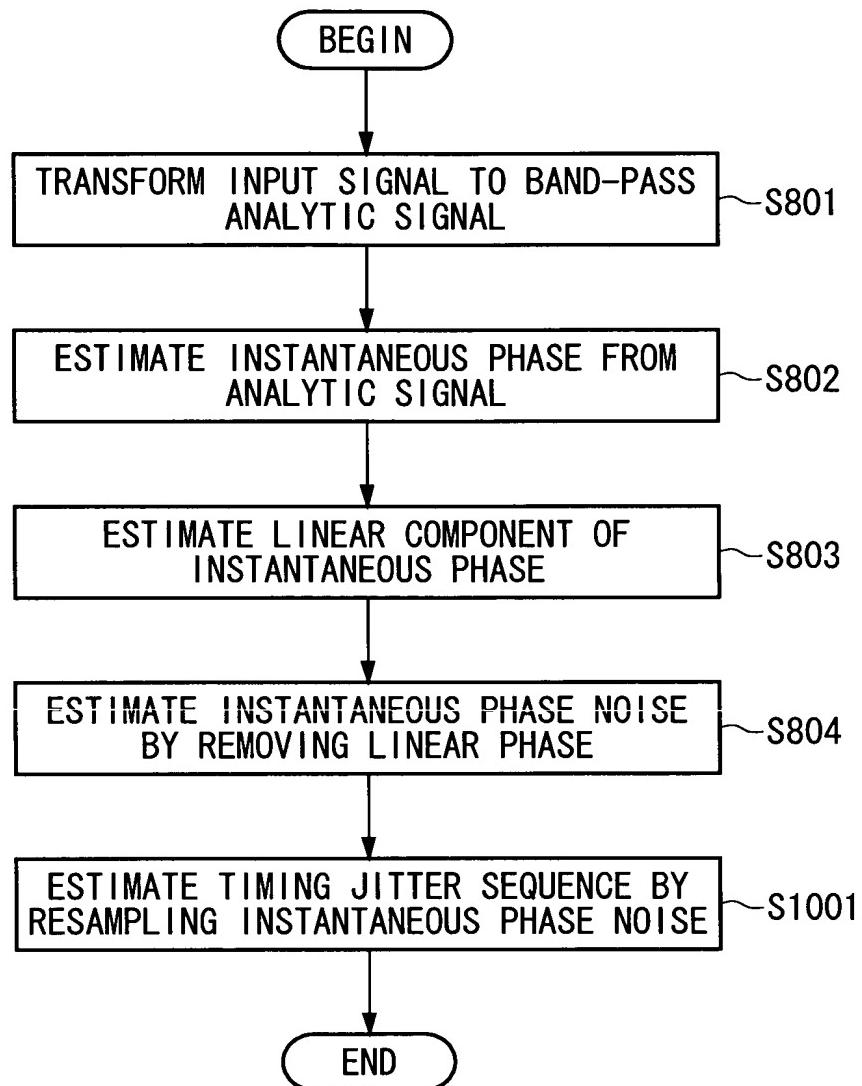


FIG. 11

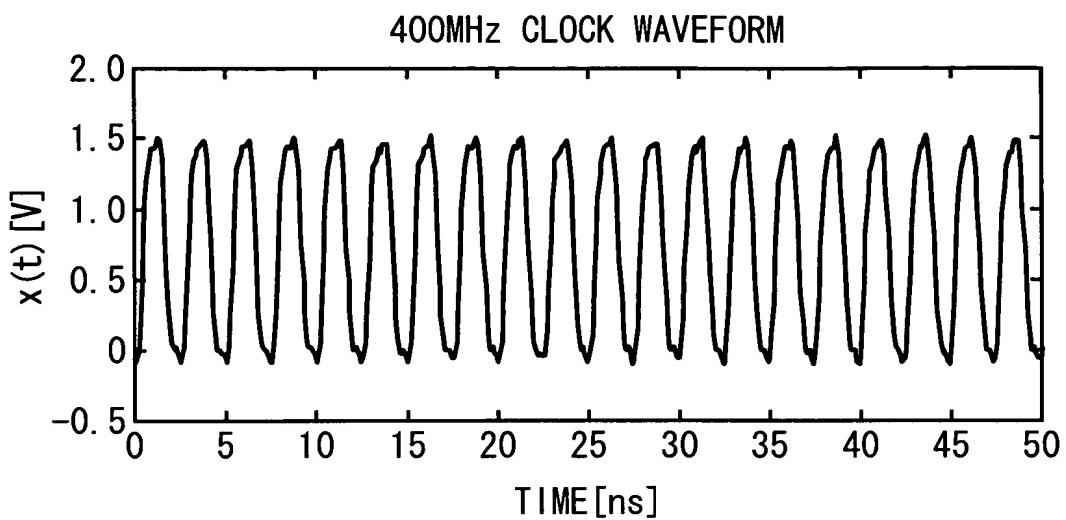


FIG. 12

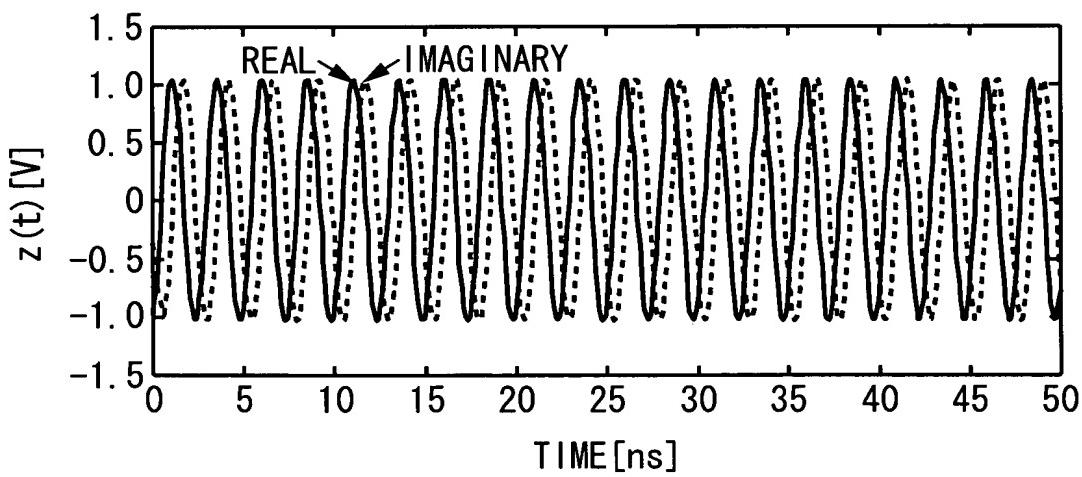


FIG. 13

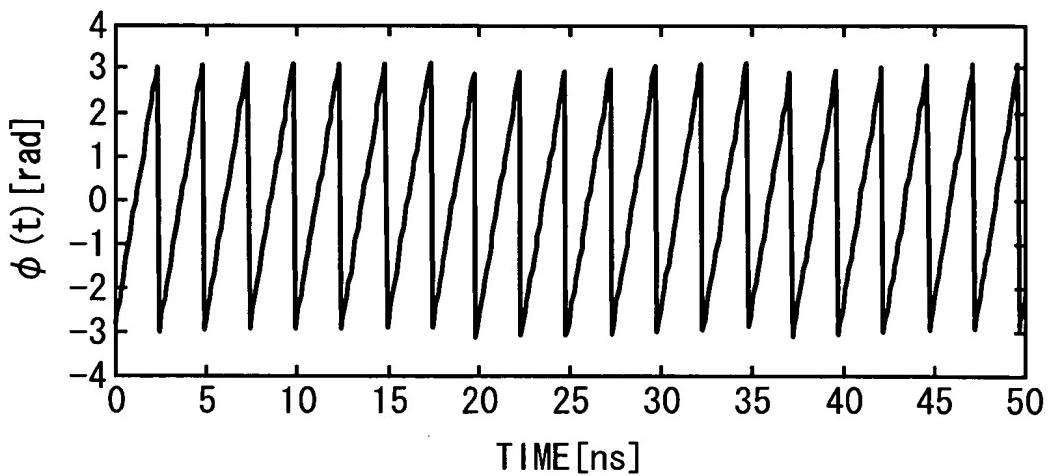
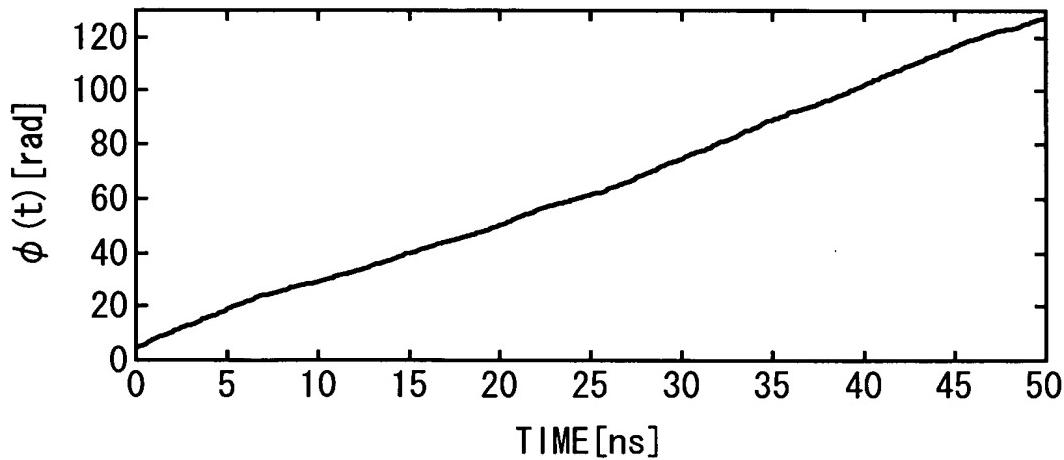


FIG. 14



10/58

FIG. 15

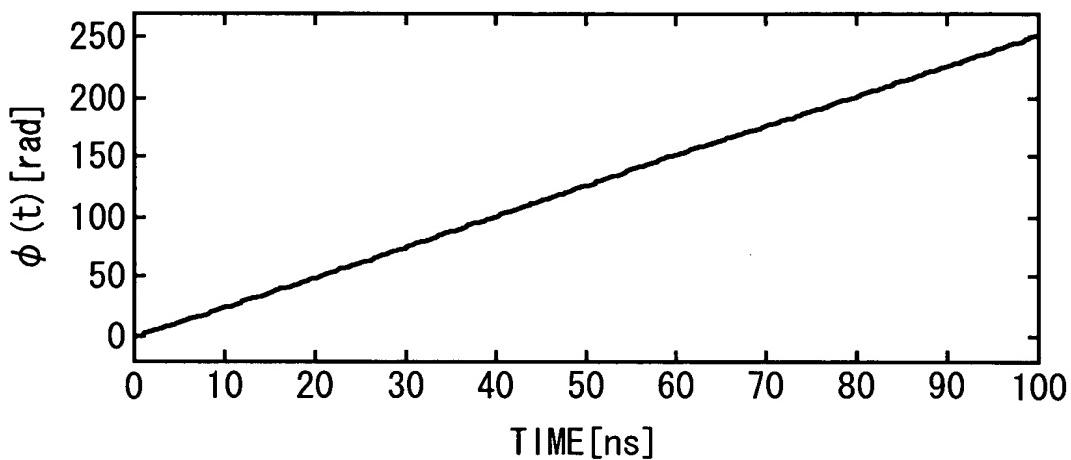
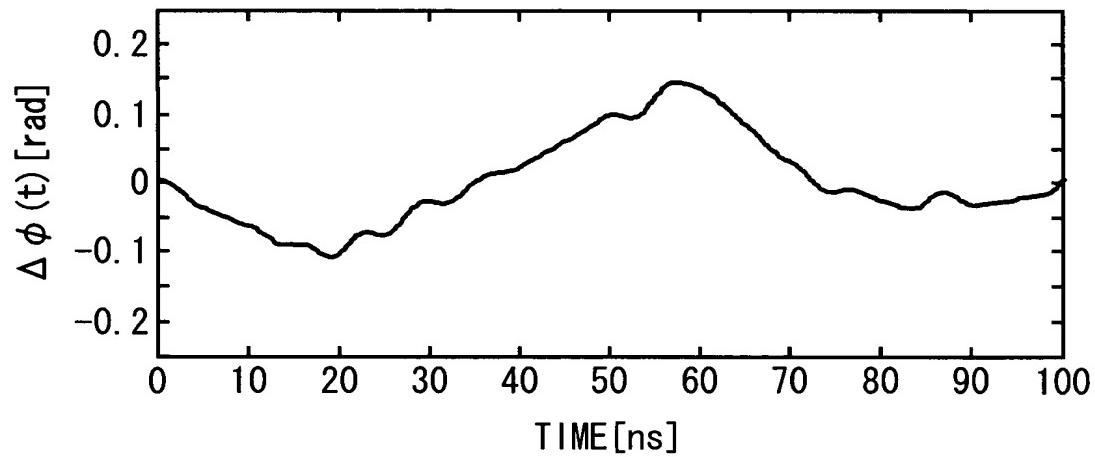


FIG. 16



11/58

FIG. 17

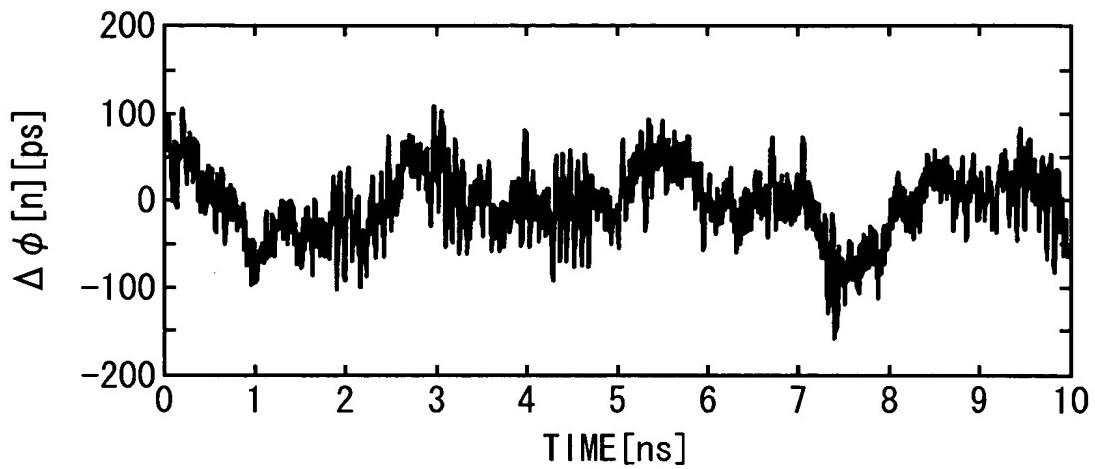
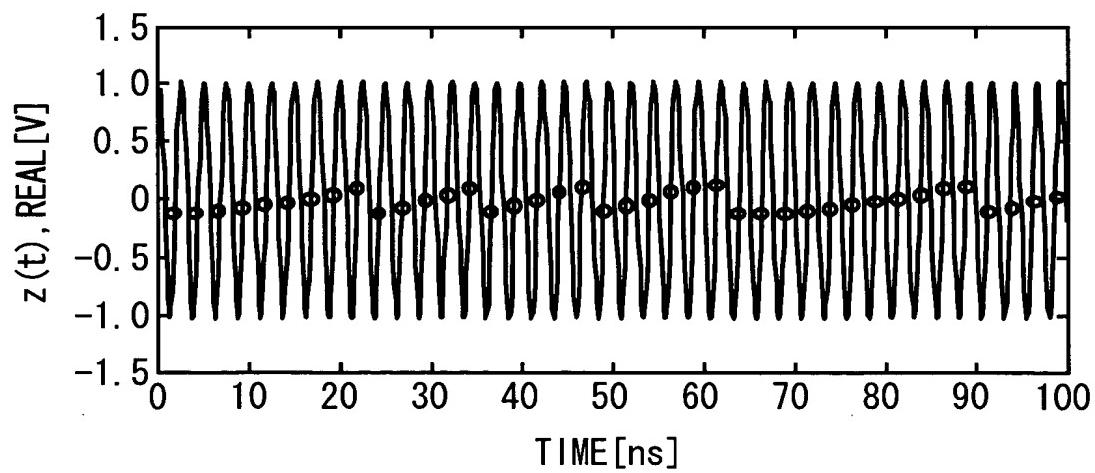


FIG. 18



12/58

FIG. 19

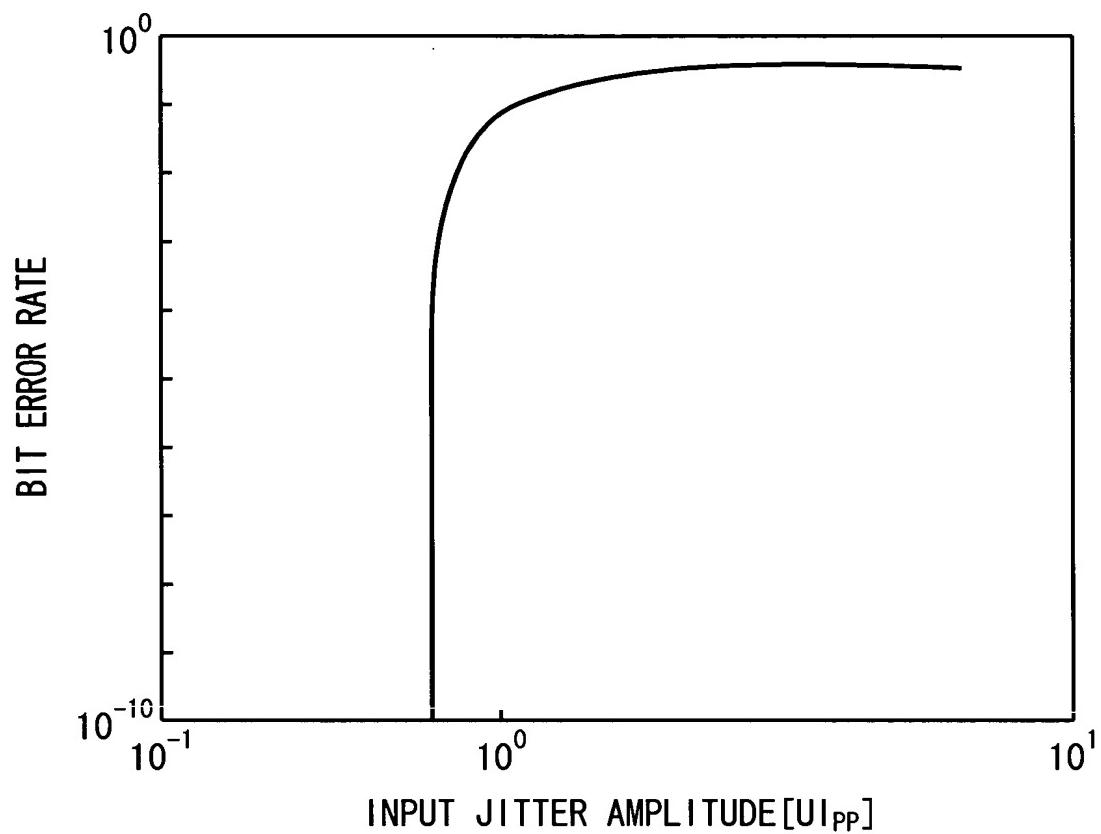


FIG. 20

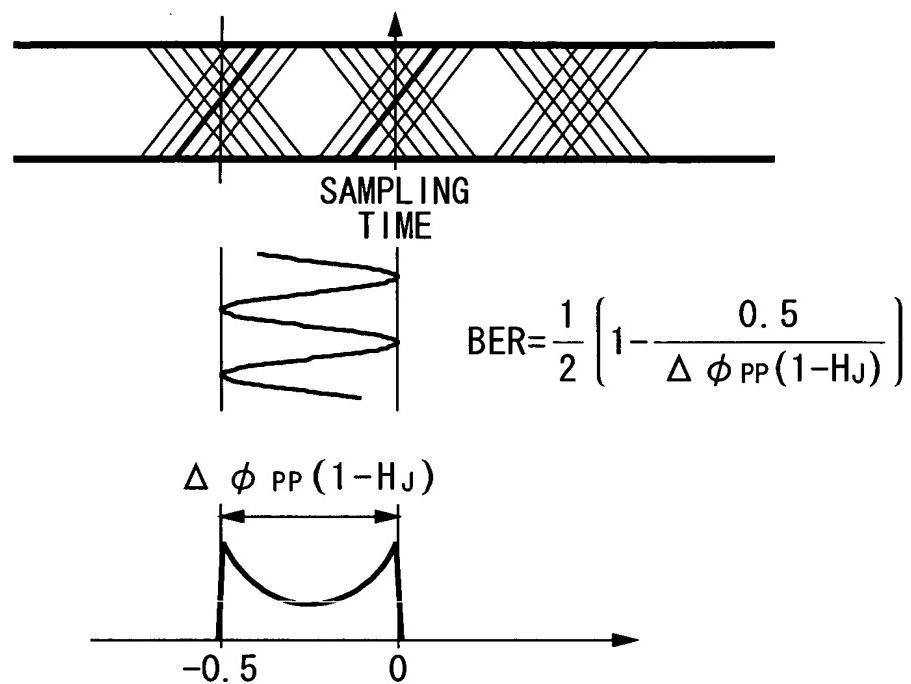


FIG. 21

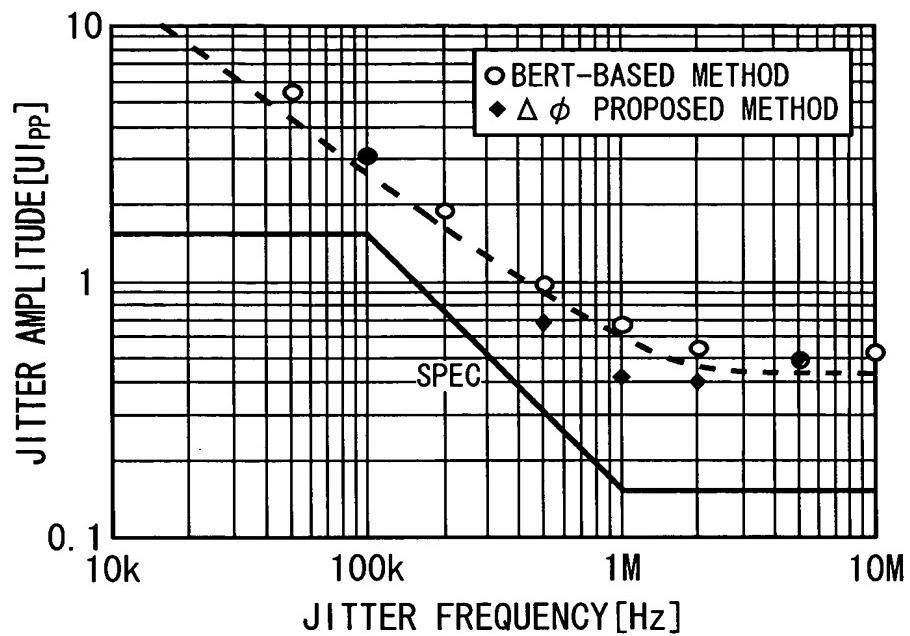


FIG. 22

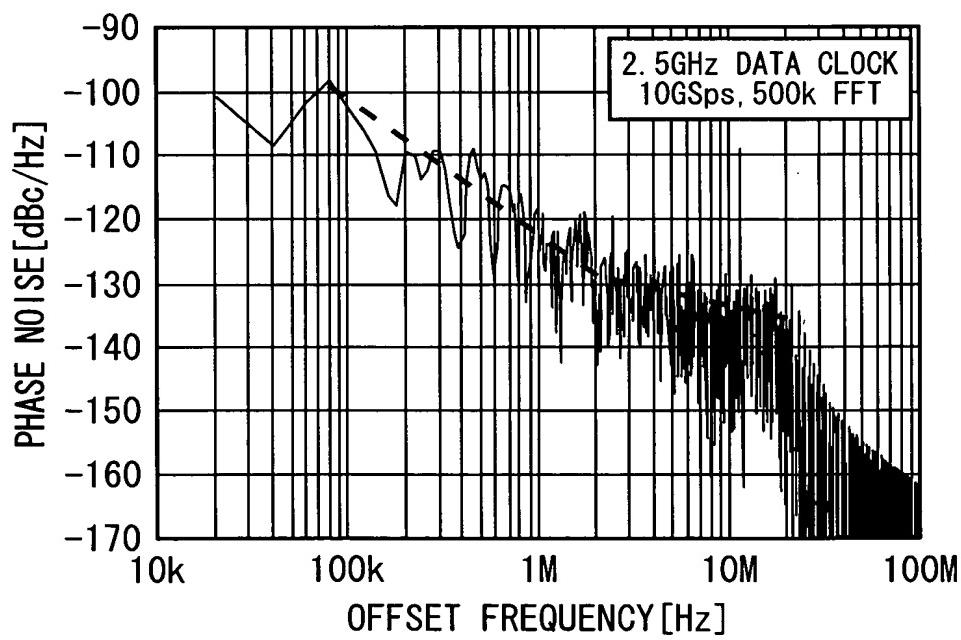


FIG. 23

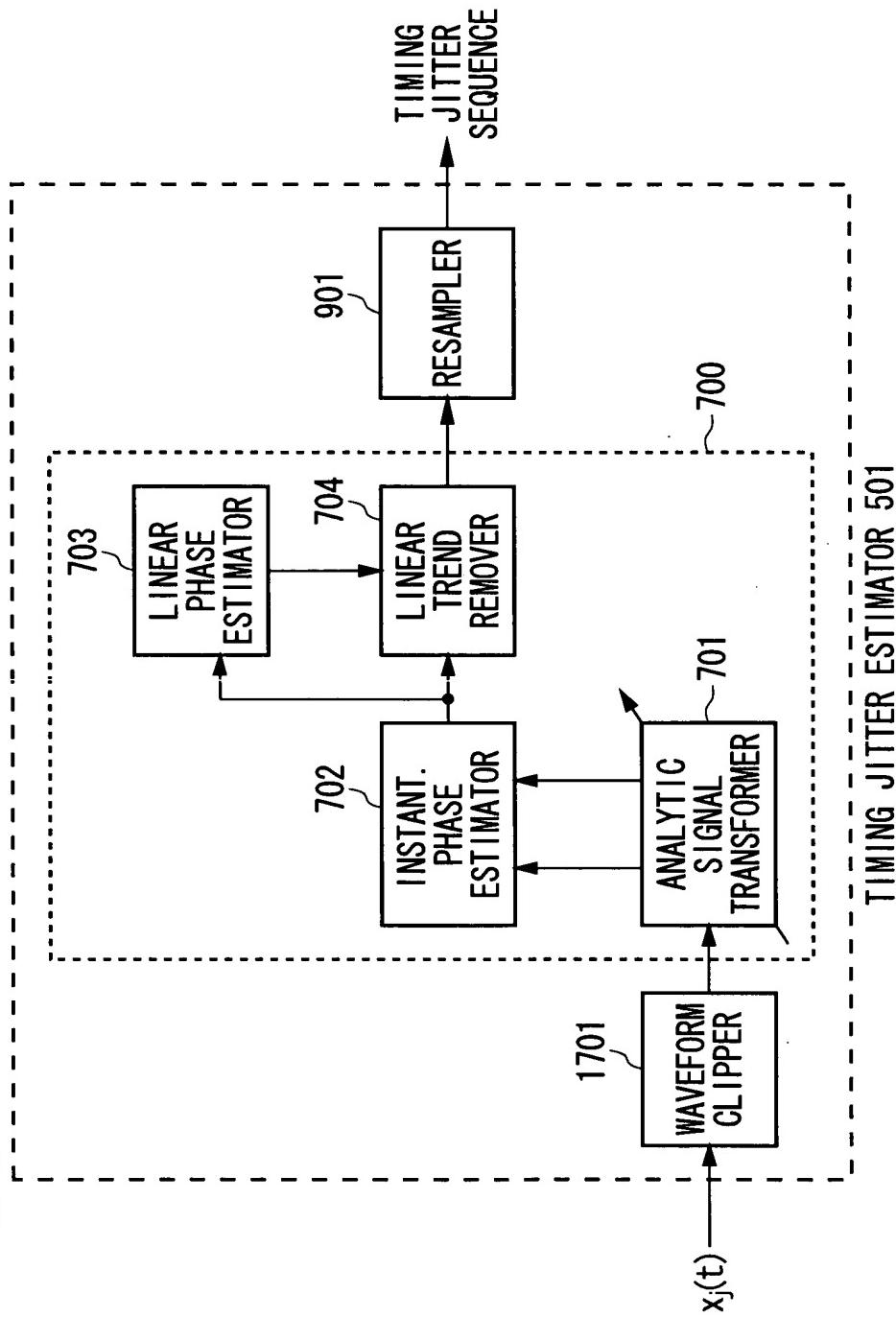


FIG. 24

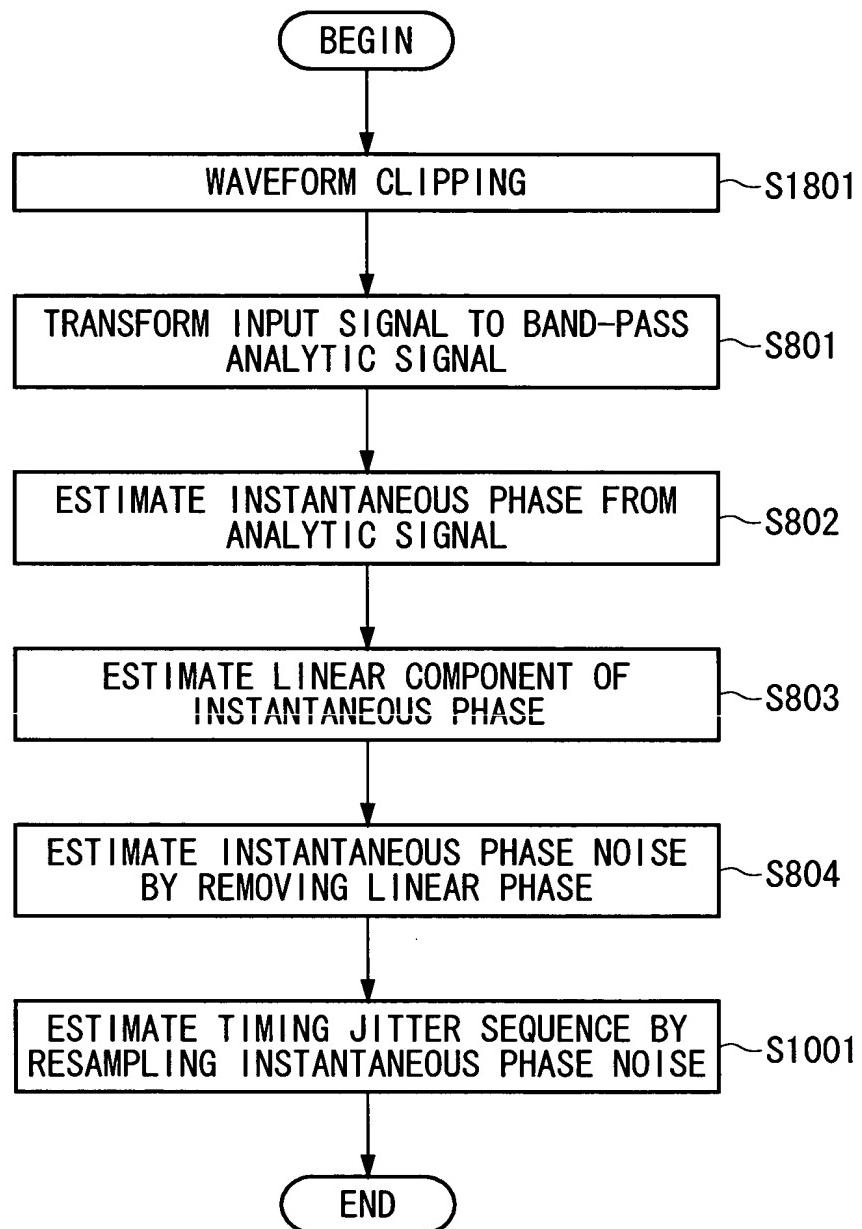


FIG. 25

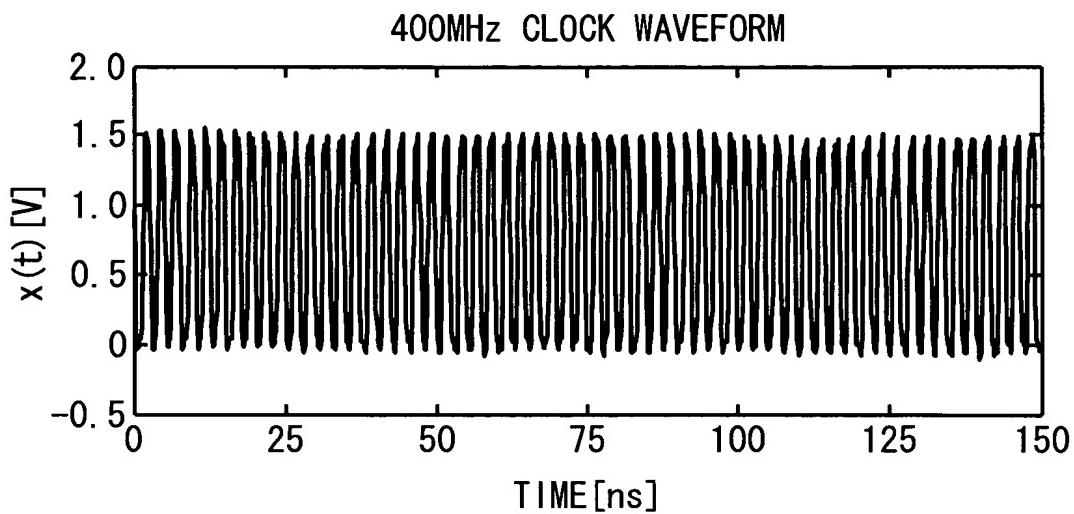


FIG. 26

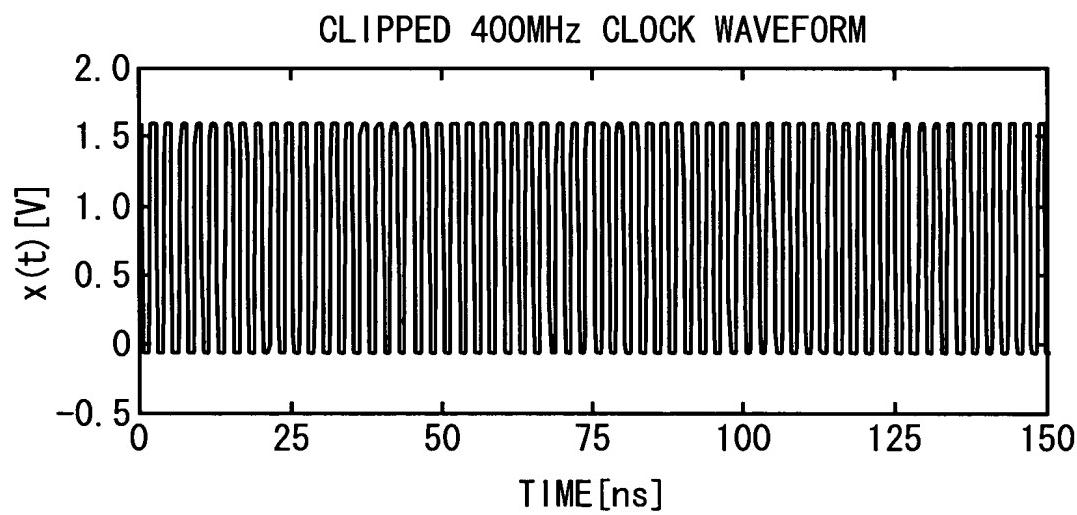


FIG. 27

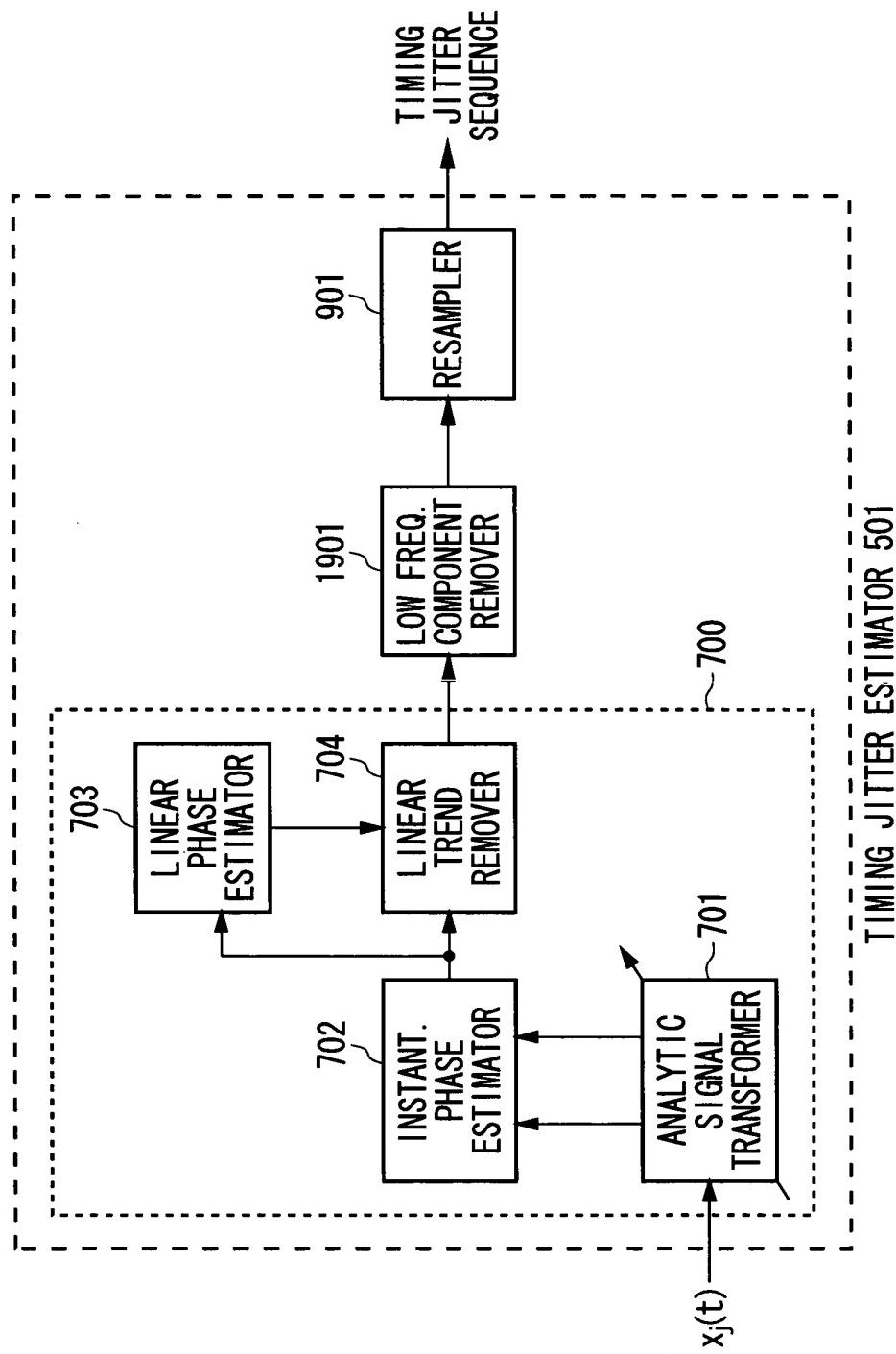


FIG. 28

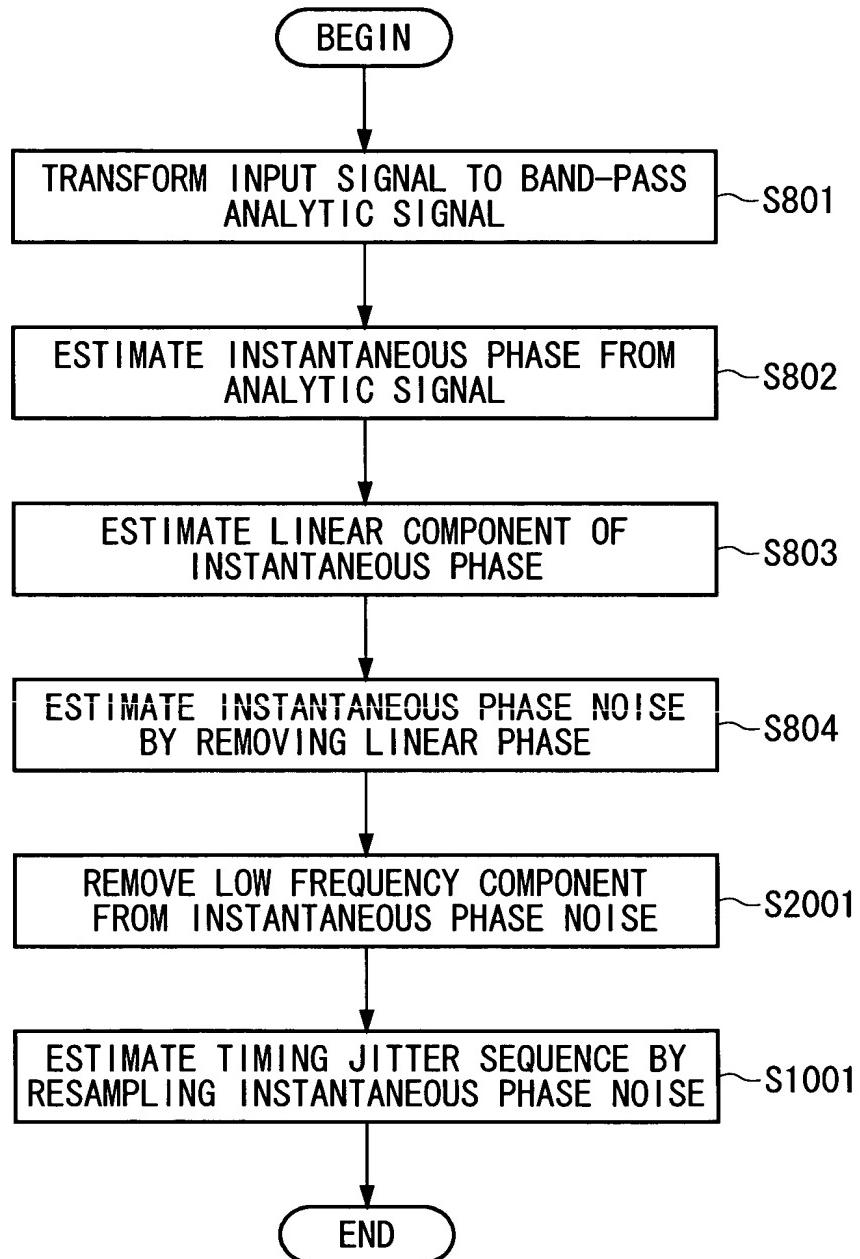


FIG. 29

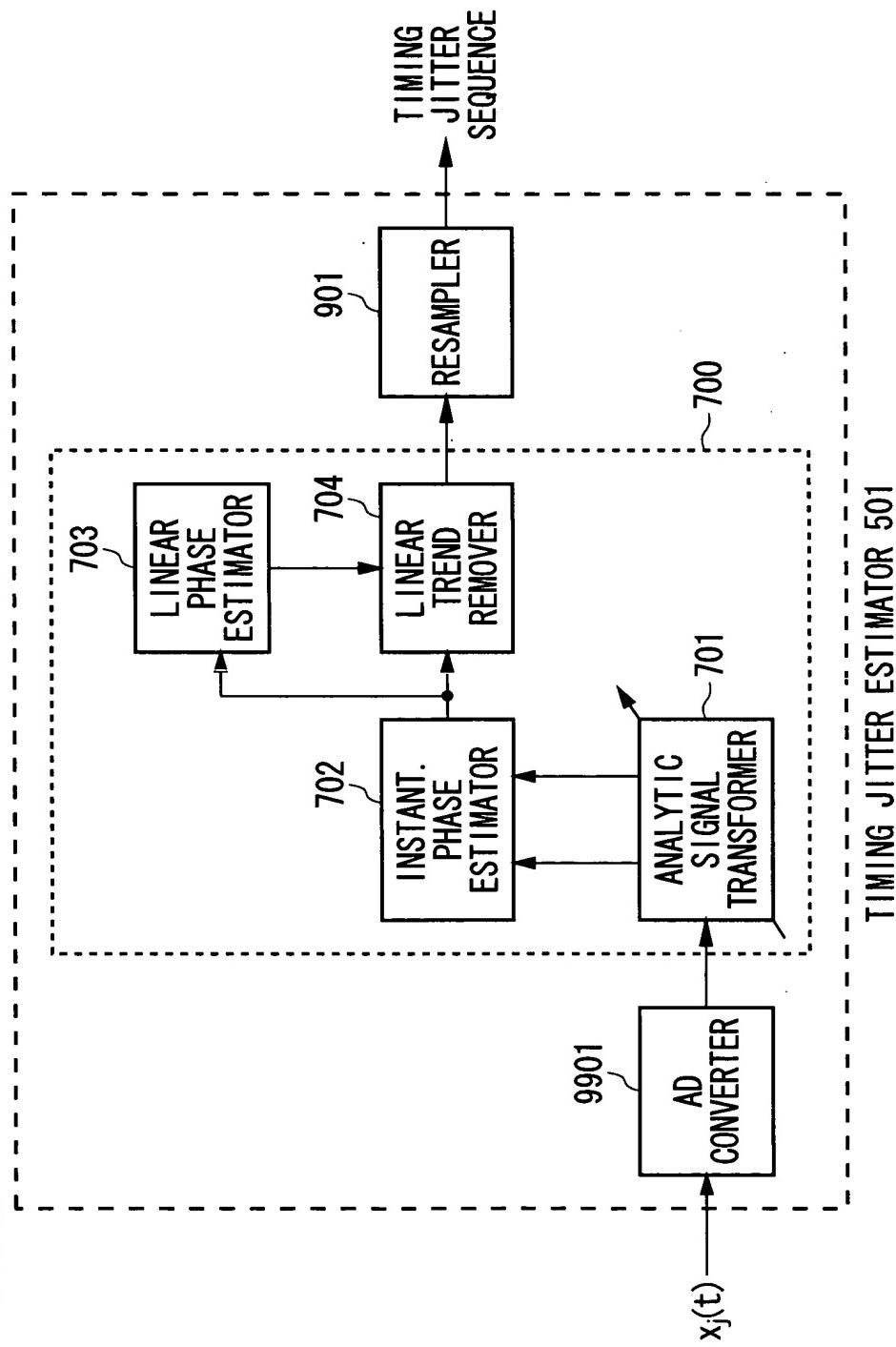


FIG. 30

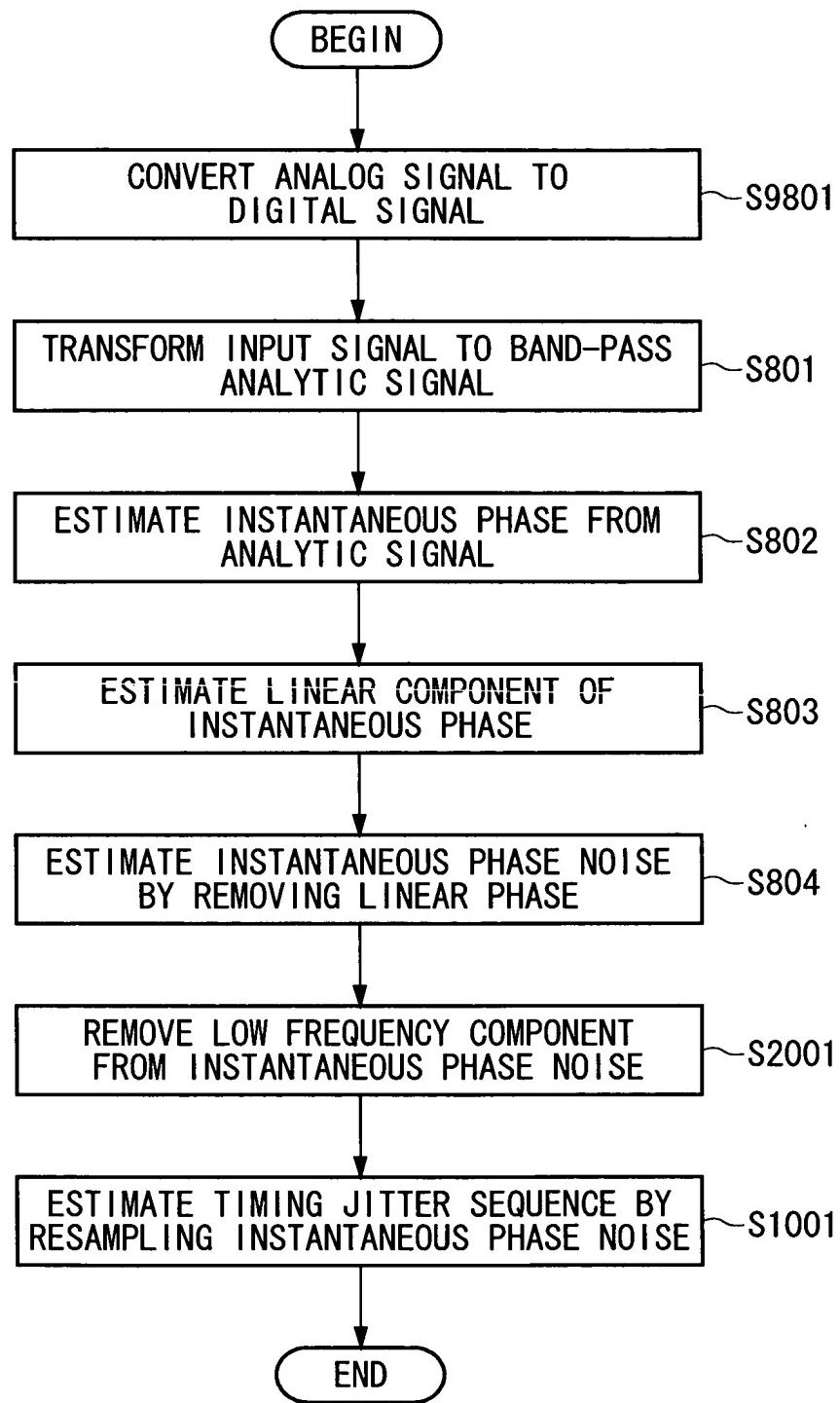


FIG. 31

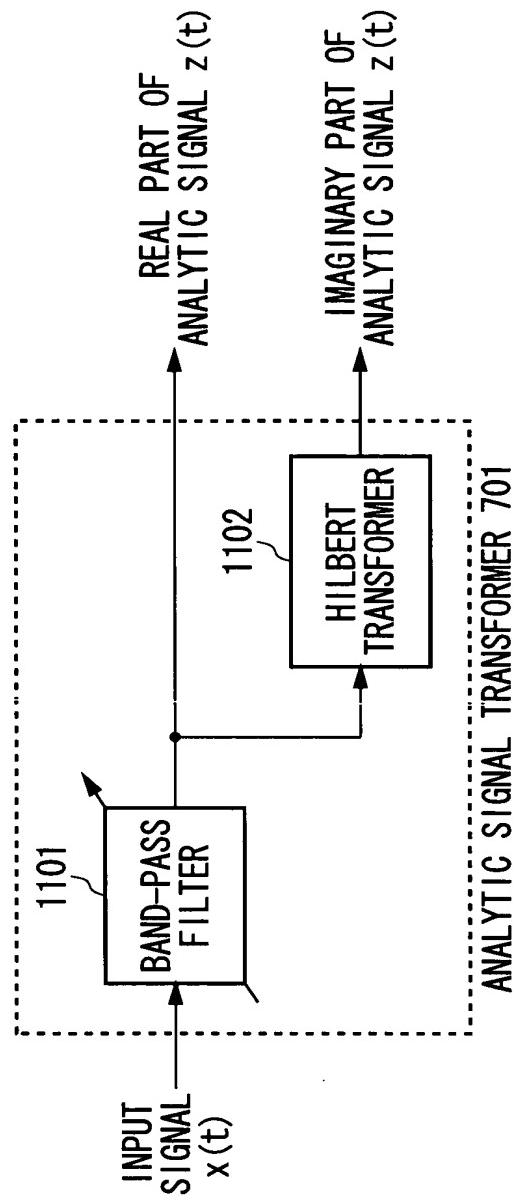


FIG. 32

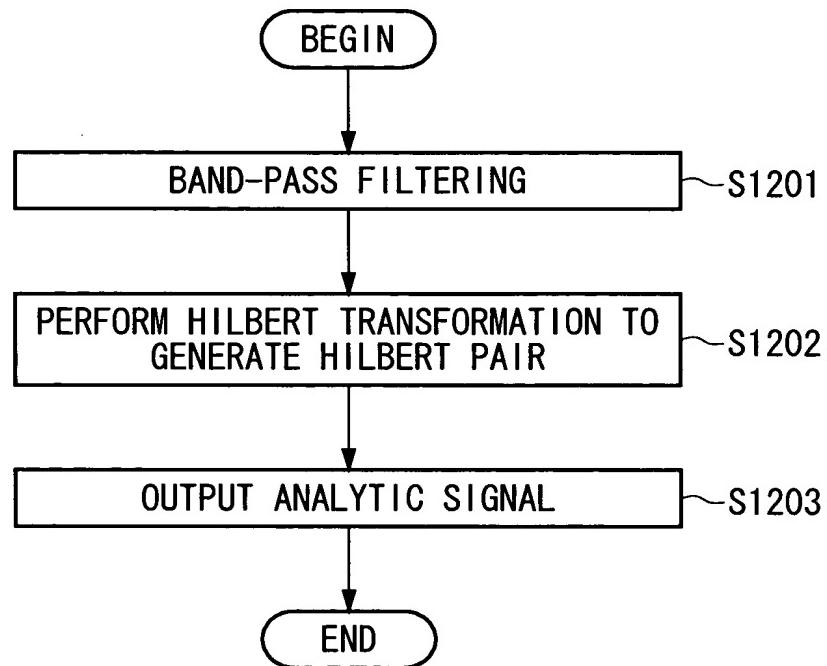


FIG. 33

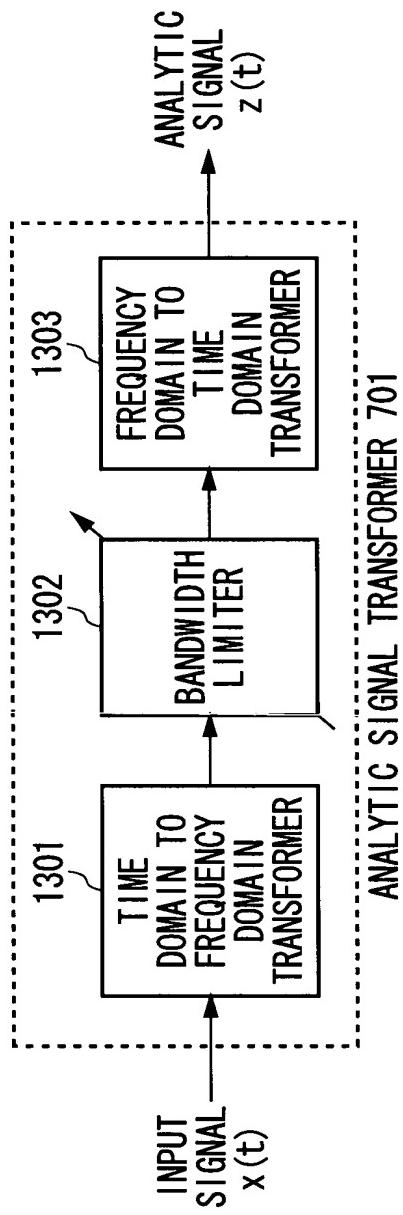


FIG. 34

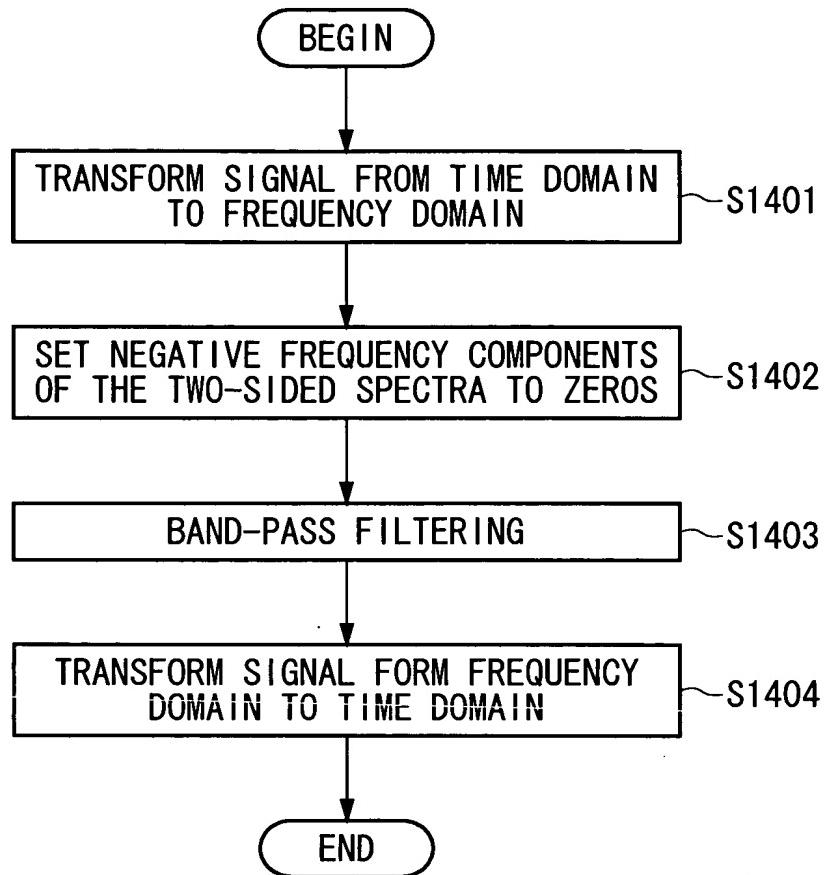
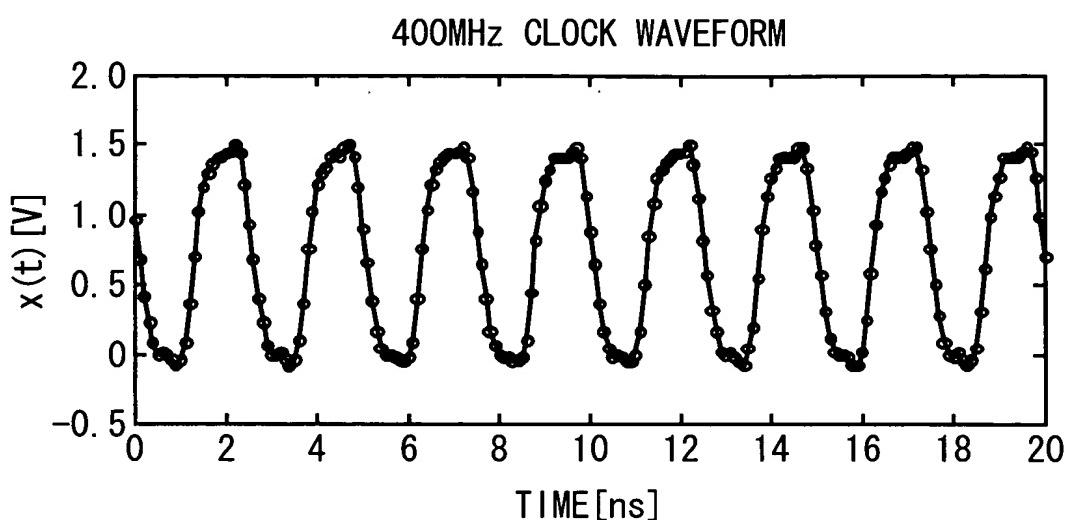


FIG. 35



27/58

FIG. 36

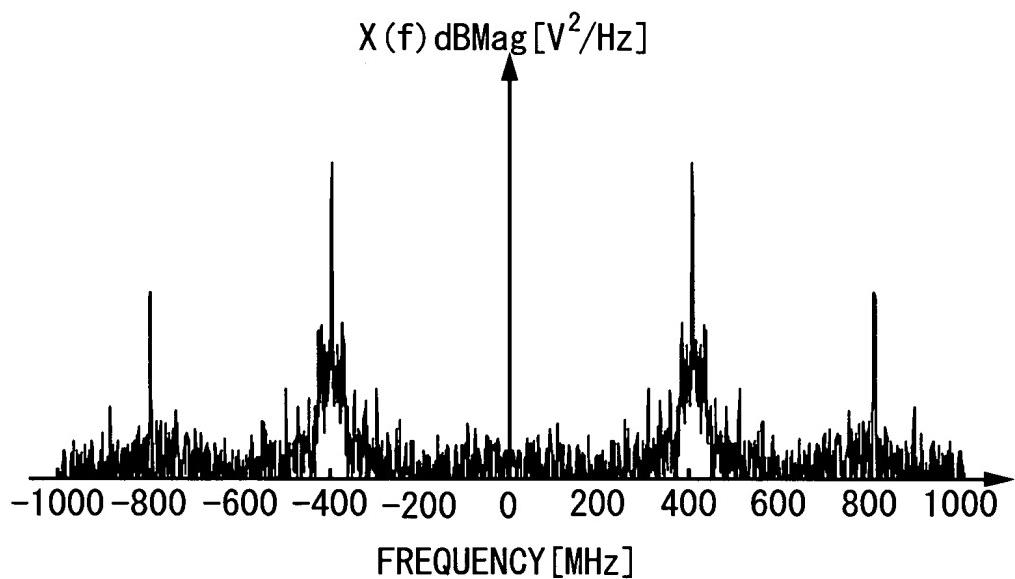


FIG. 37

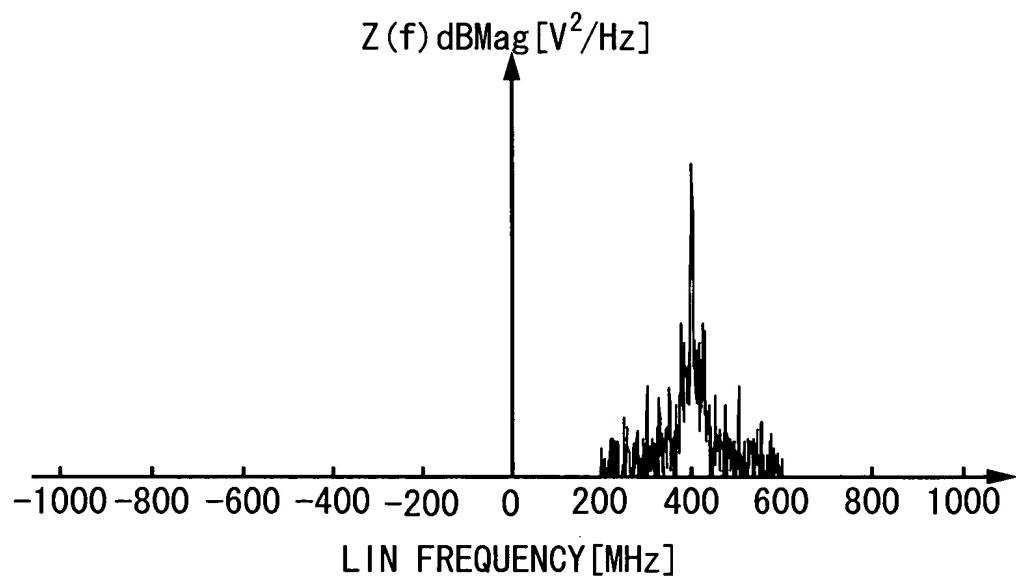


FIG. 38

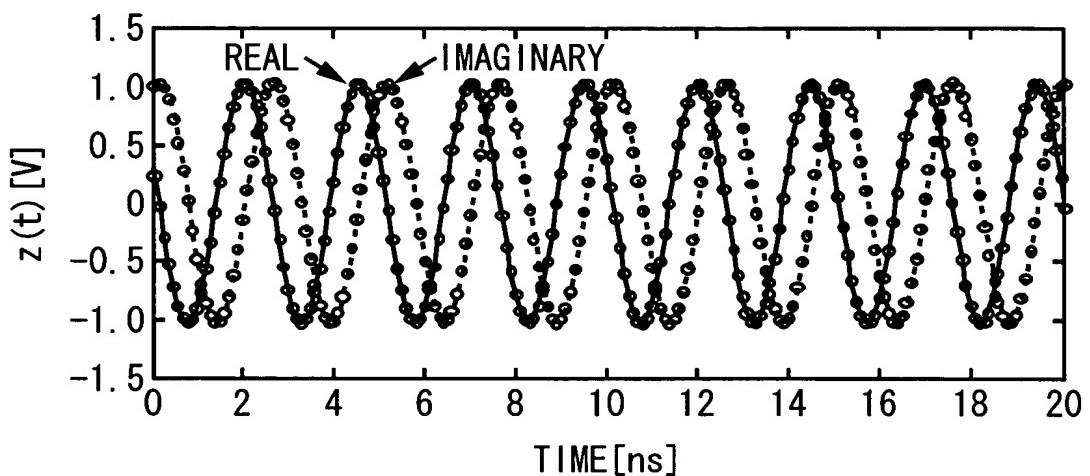


FIG. 39

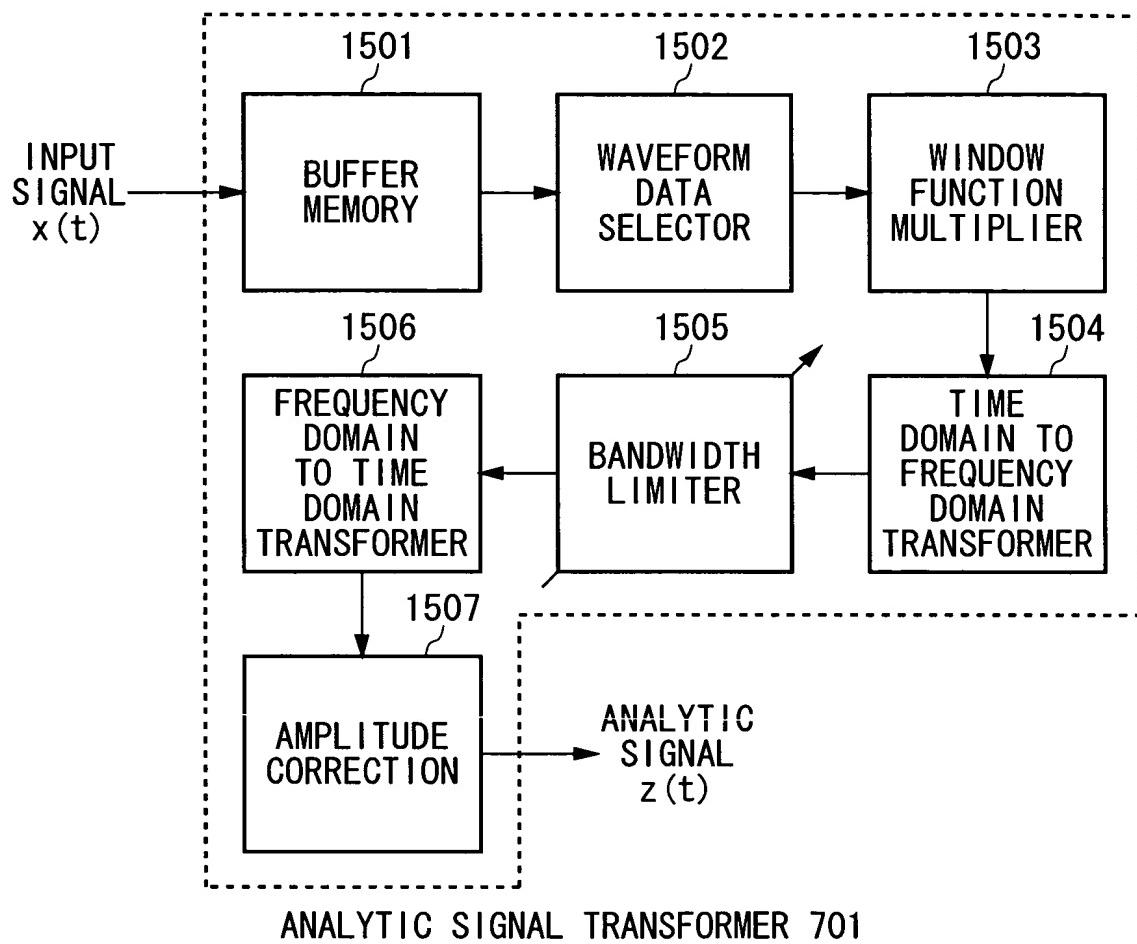


FIG. 40

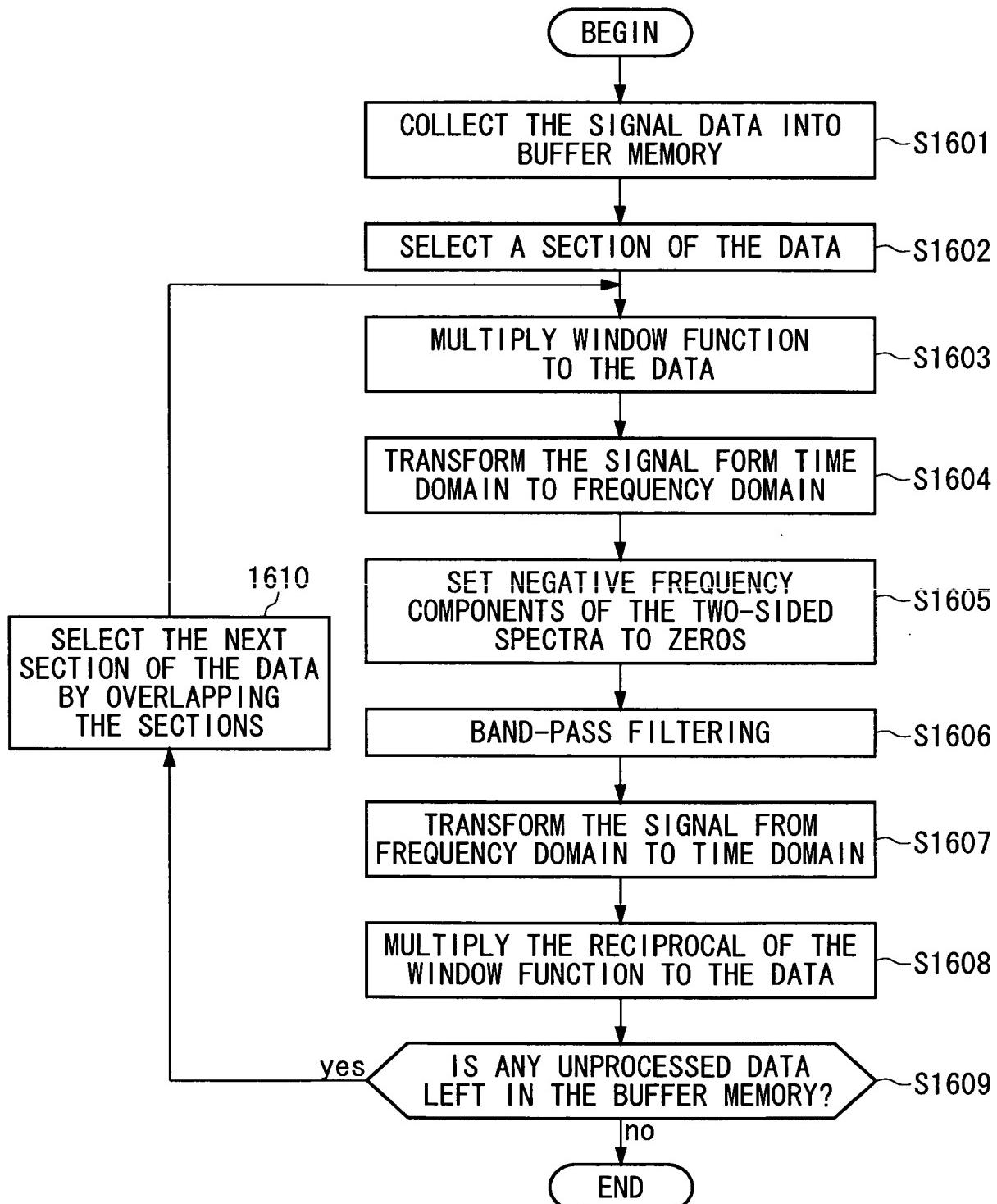


FIG. 41

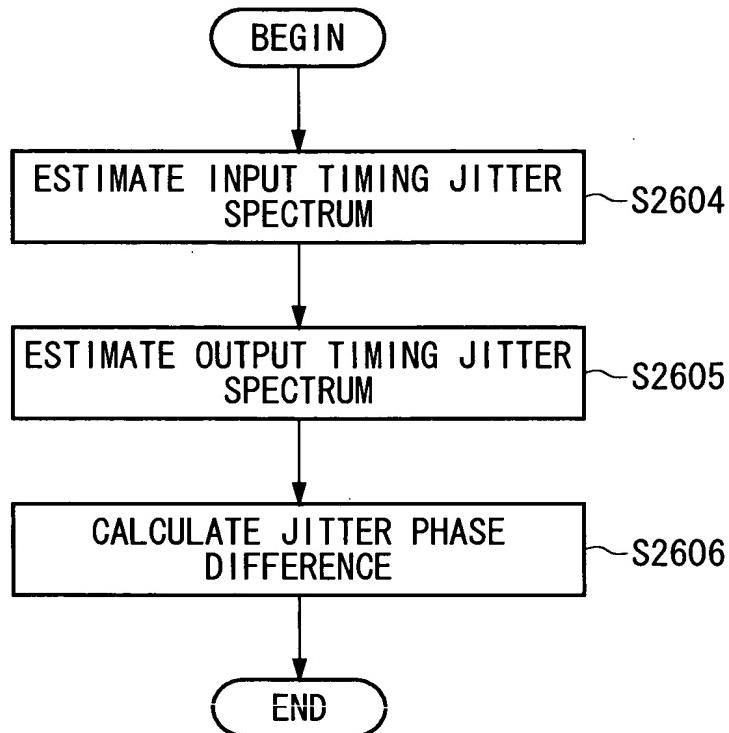


FIG. 42

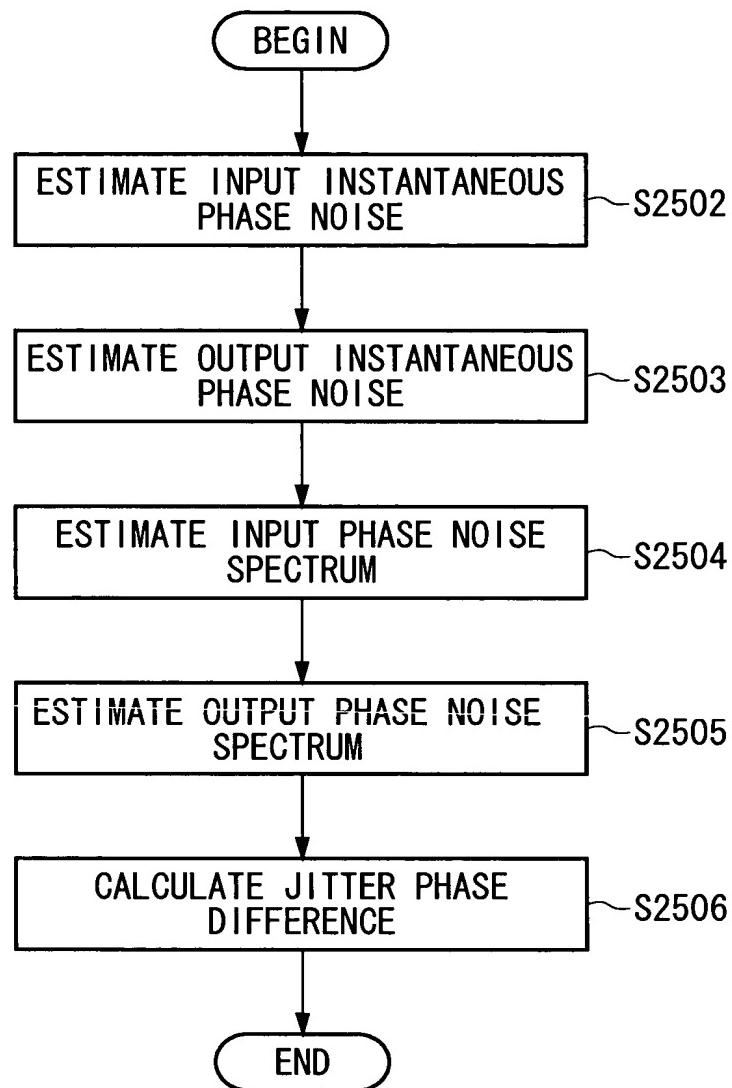


FIG. 43

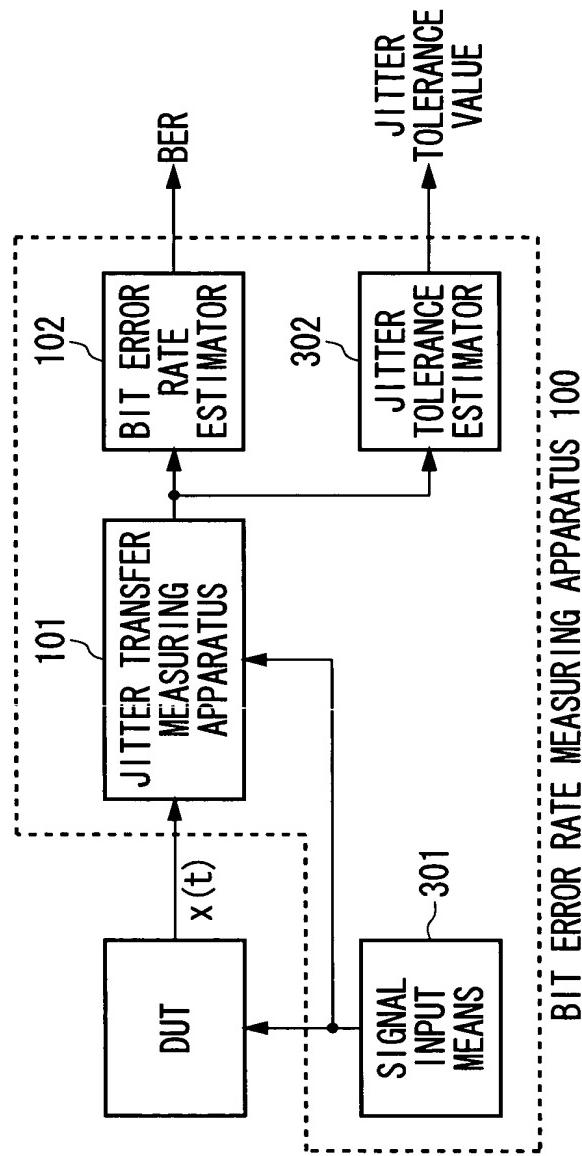


FIG. 44

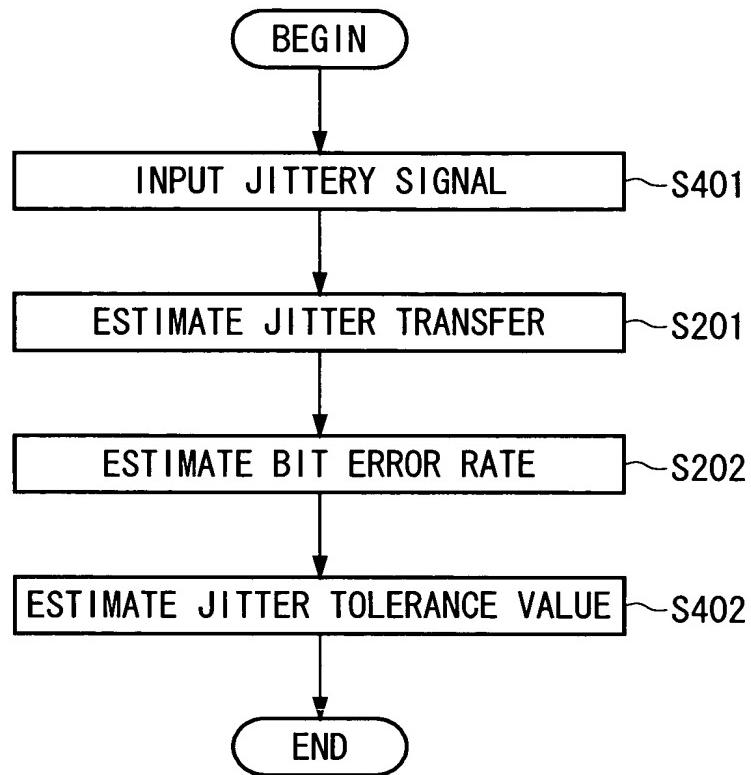


FIG. 45

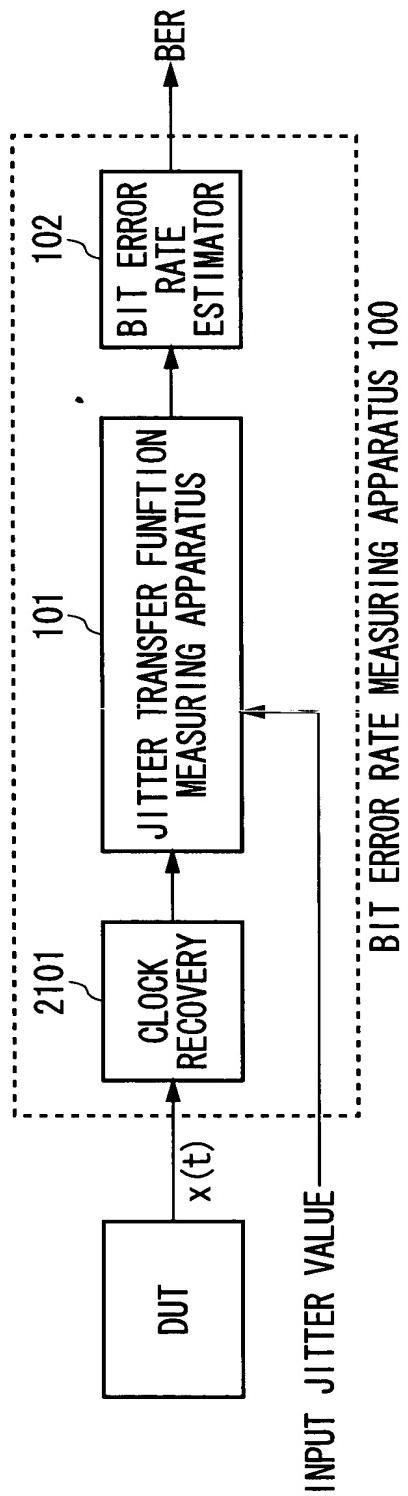


FIG. 46

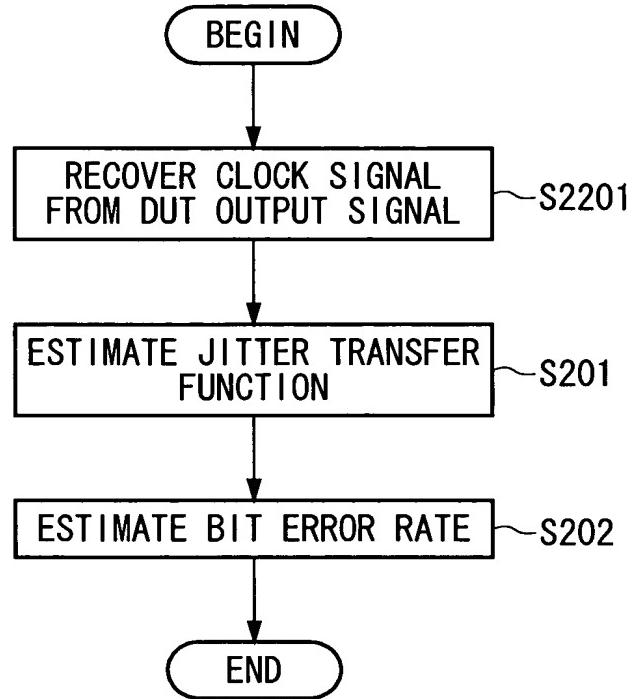
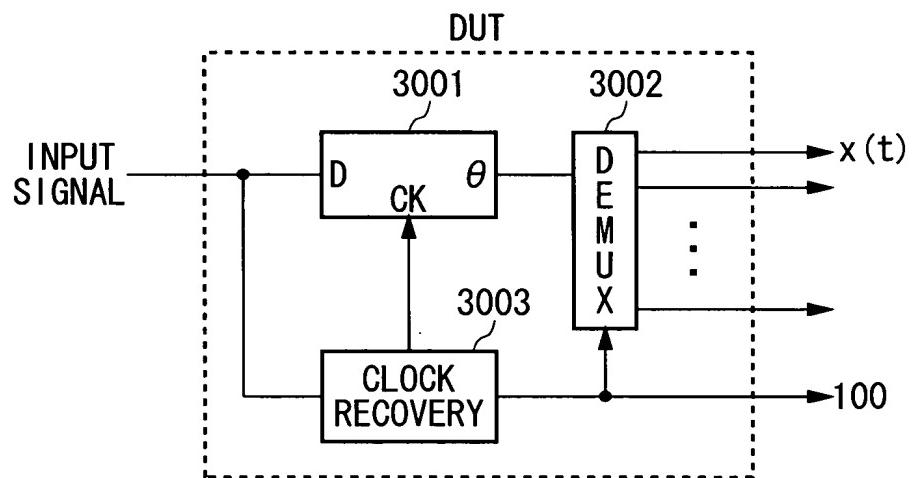


FIG. 47



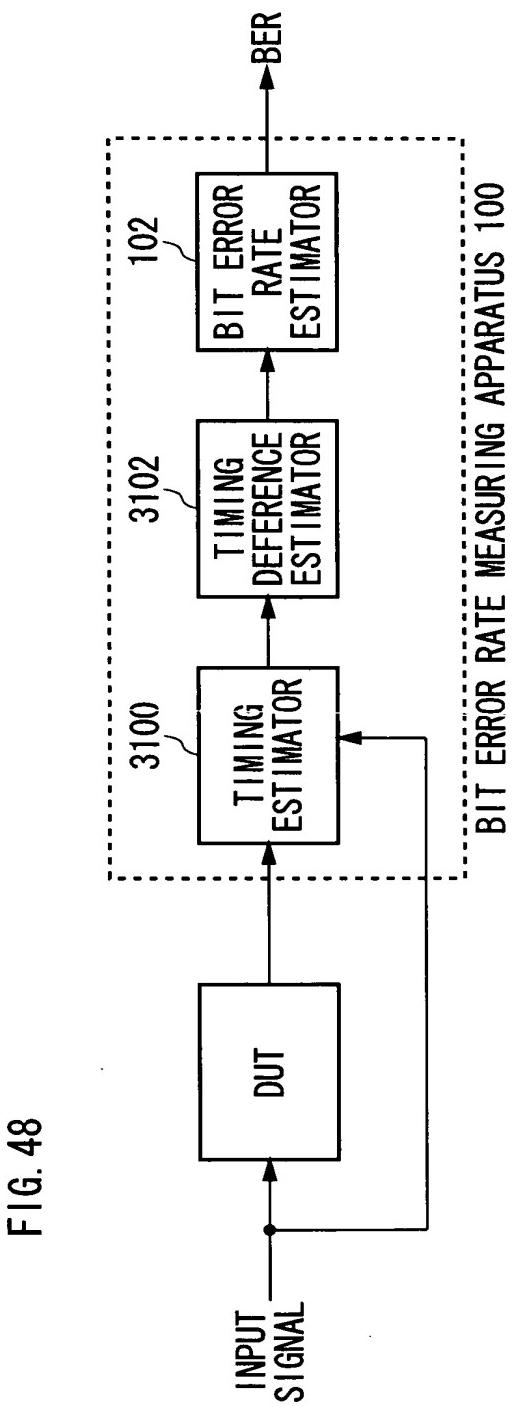


FIG. 49

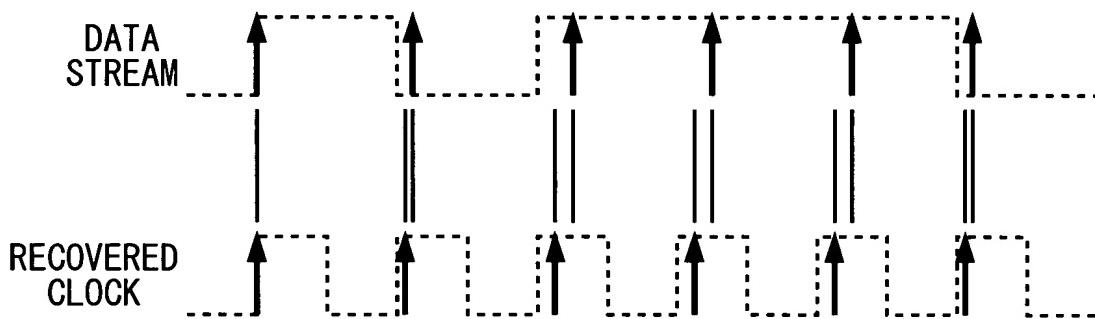


FIG. 50

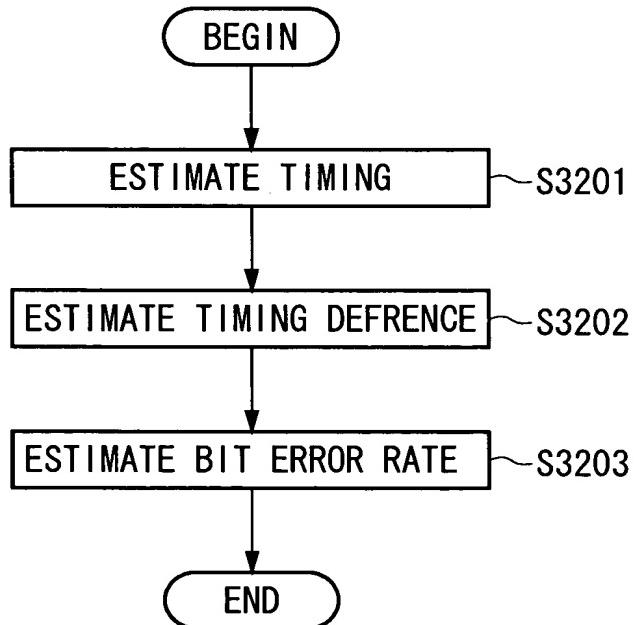


FIG. 51

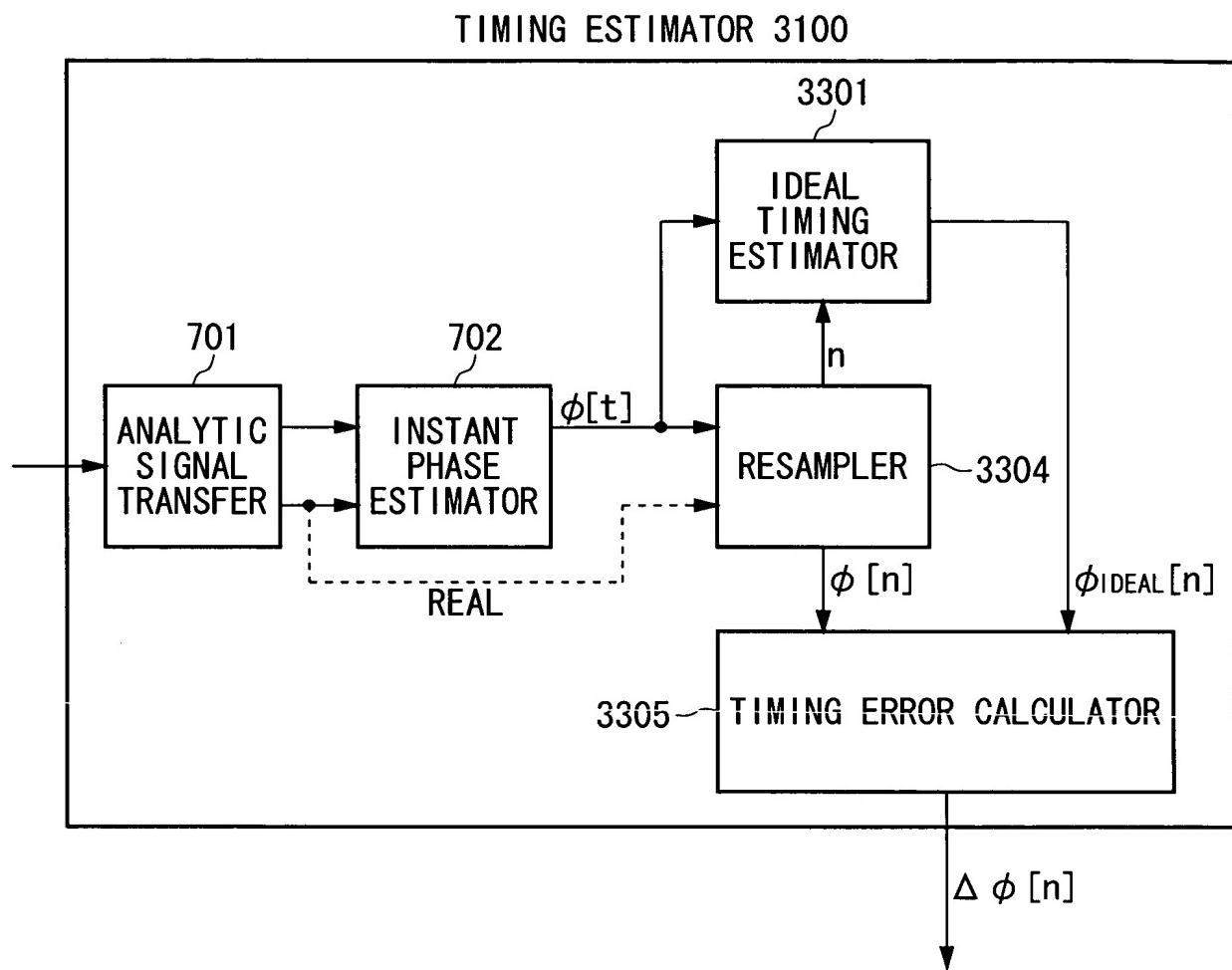


FIG. 52

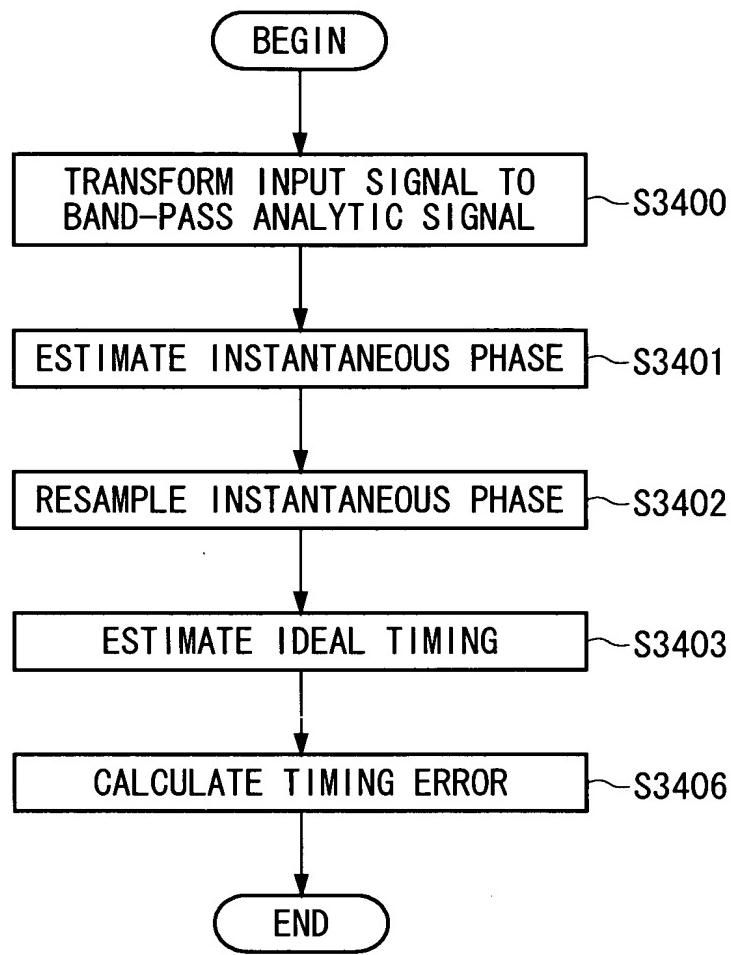
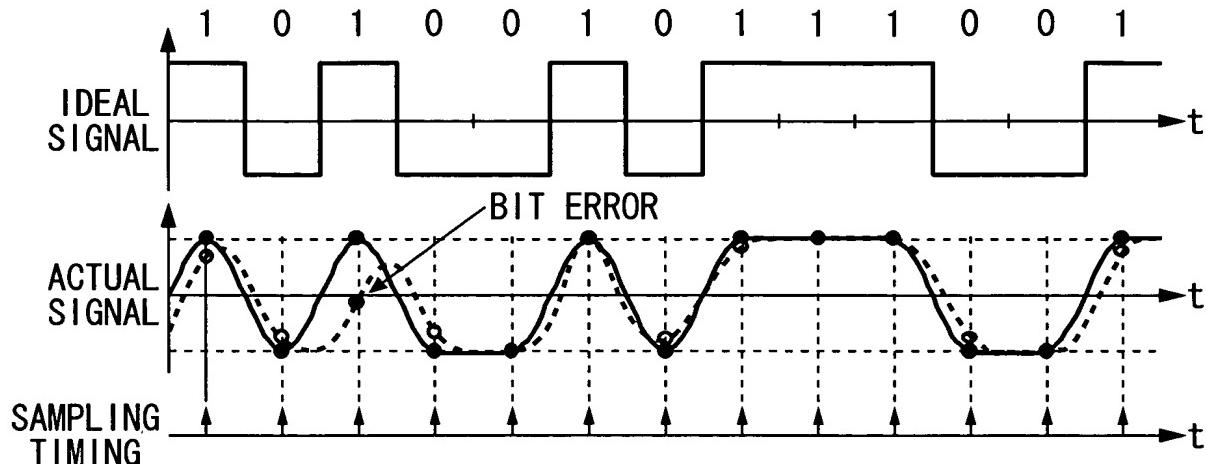


FIG. 53



$$\text{BER} = \frac{\text{NUMBER OF BITS DETECTED IN ERROR IN A TIME INTERVAL}}{\text{TOTAL NUMBER OF BITS TRANSMITTED IN A TIME INTERVAL}}$$

FIG. 54

	CONVENTIONAL (BERT-BASED)	$\Delta \phi$ METHOD
# OF MEASUREMENTS	20	4
TIME PER MEASUREMENTS	1sec	0.5sec
TOTAL TESTING TIME	20sec	2sec

FIG. 55

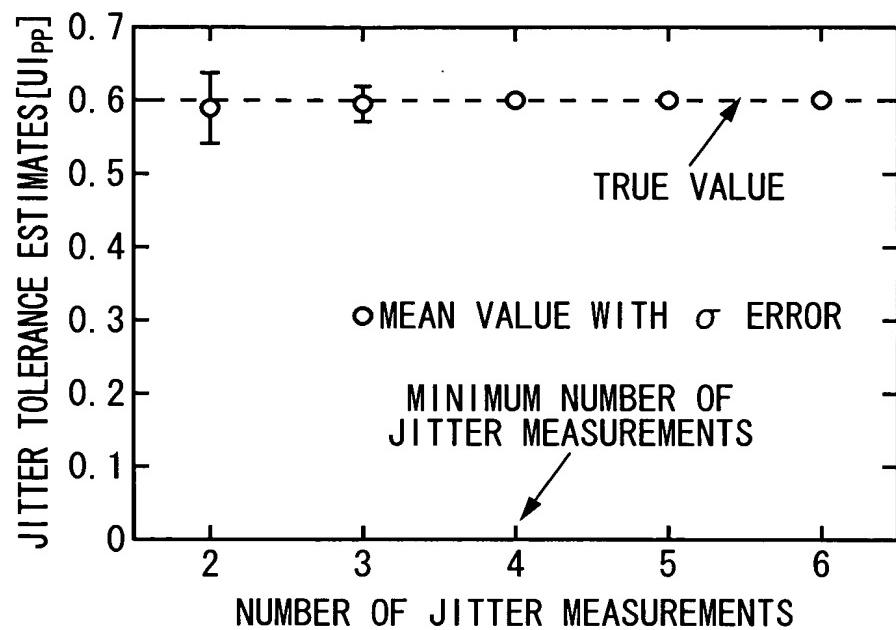


FIG. 56

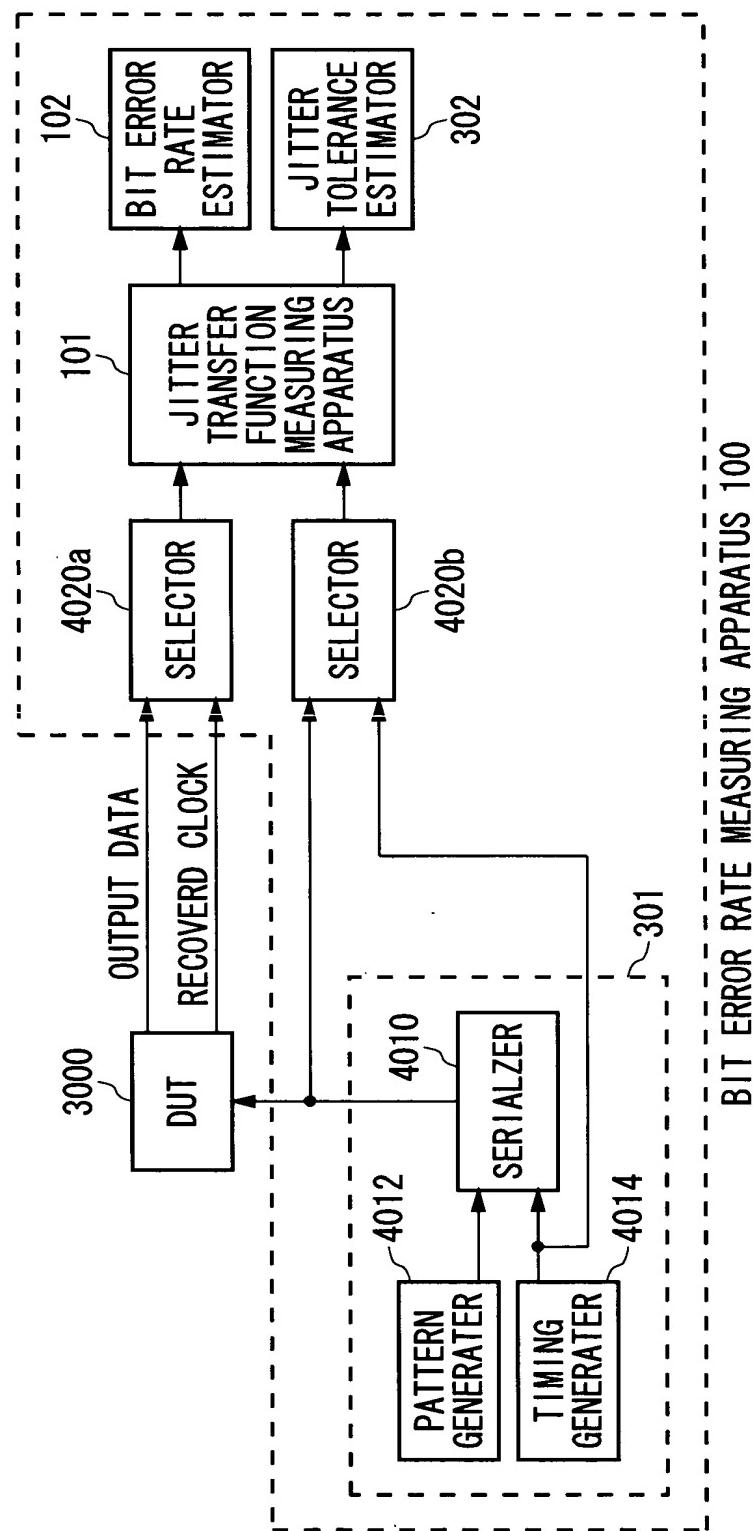


FIG. 57

DATA A	1 1 0 0 0 1 1 0	0 1 1 0 1 0 0 1	0 0 1 0 1 0 1 1	0 ...
DATA B	1 1 0 0 1 0 0 1	0 0 1 1 1 0 0 1	1 0 1 1 0 1 1 1	0 ...
DATA C	1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1	0 ...

FIG. 58

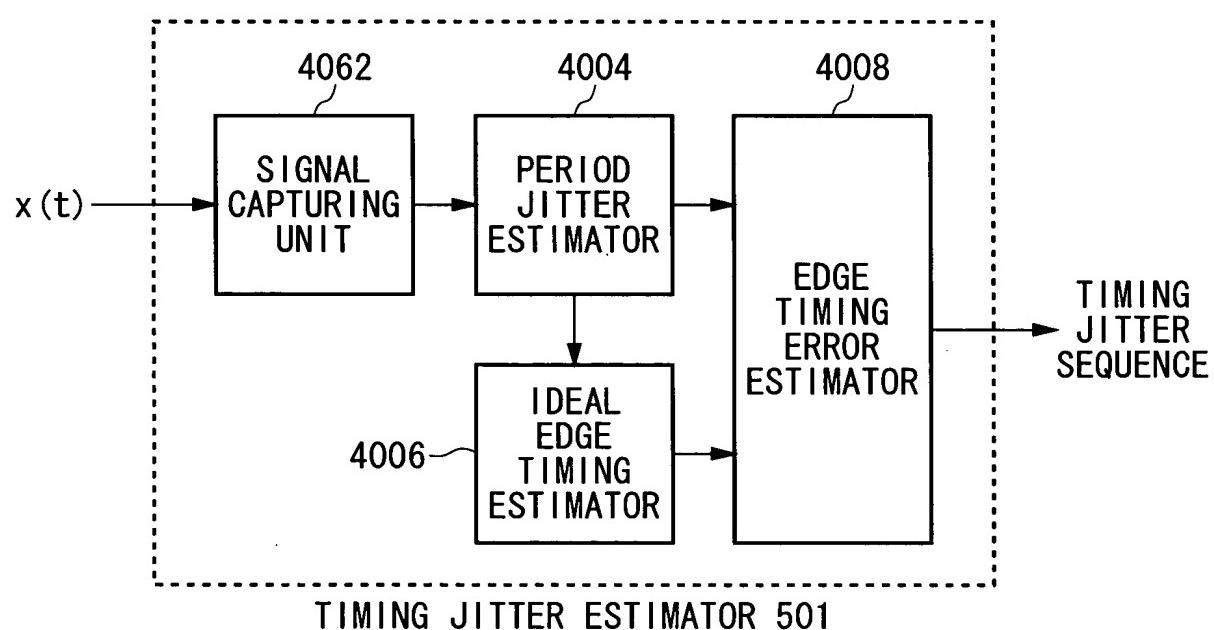


FIG. 59

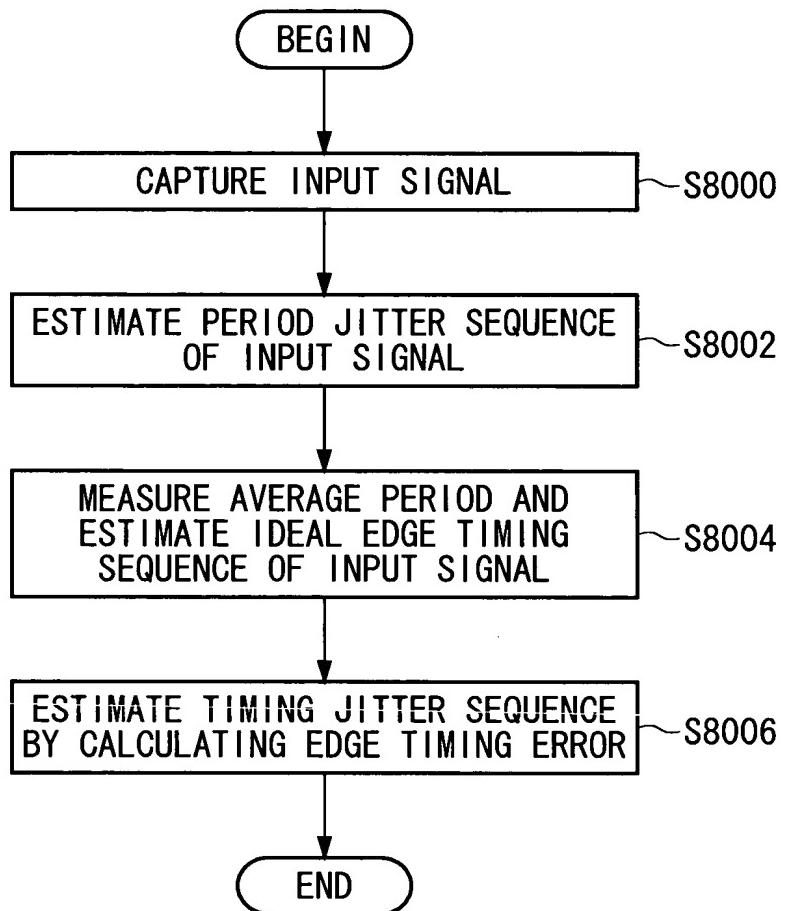


FIG. 60

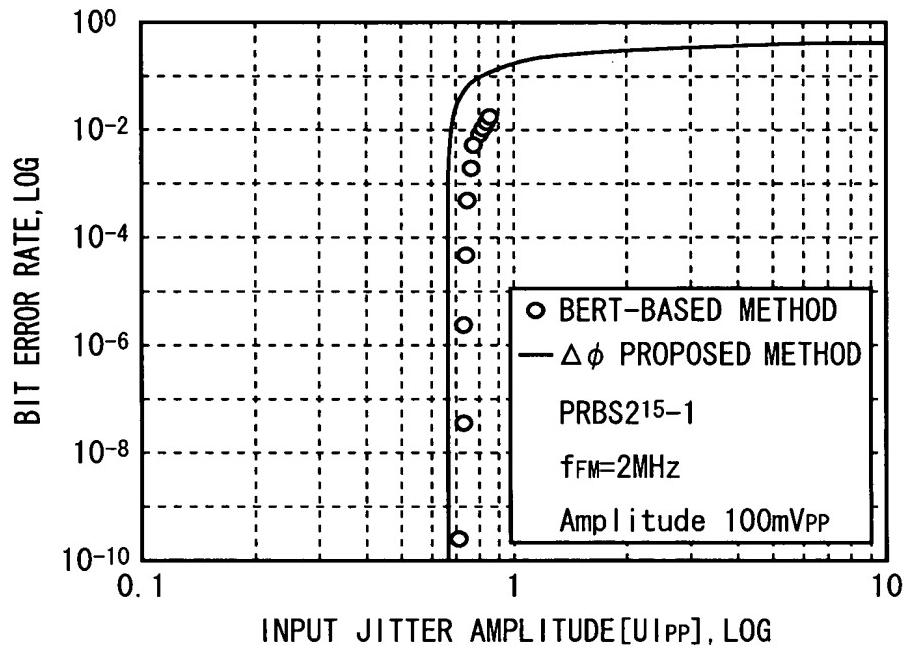


FIG. 61

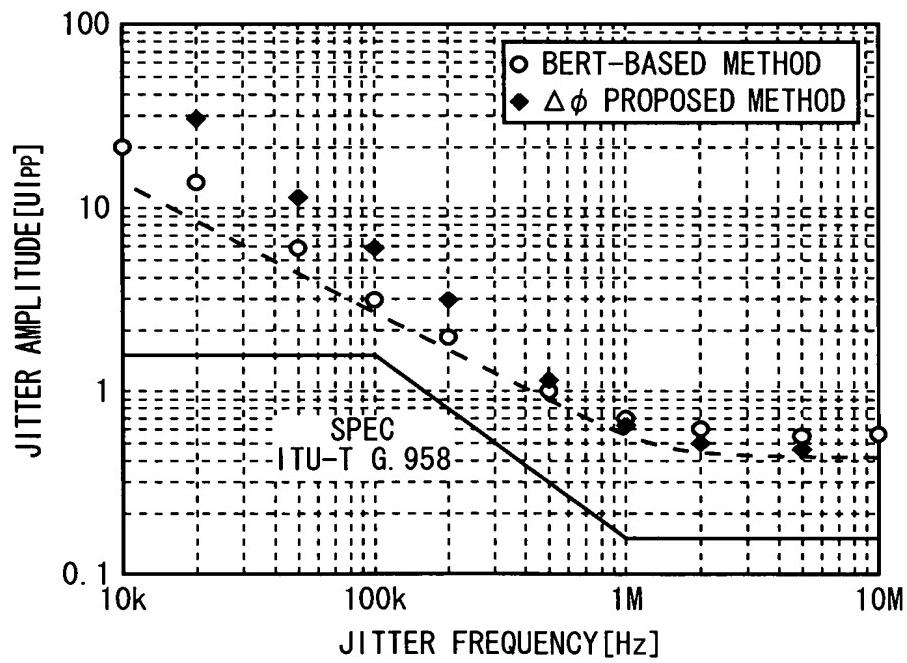


FIG. 62

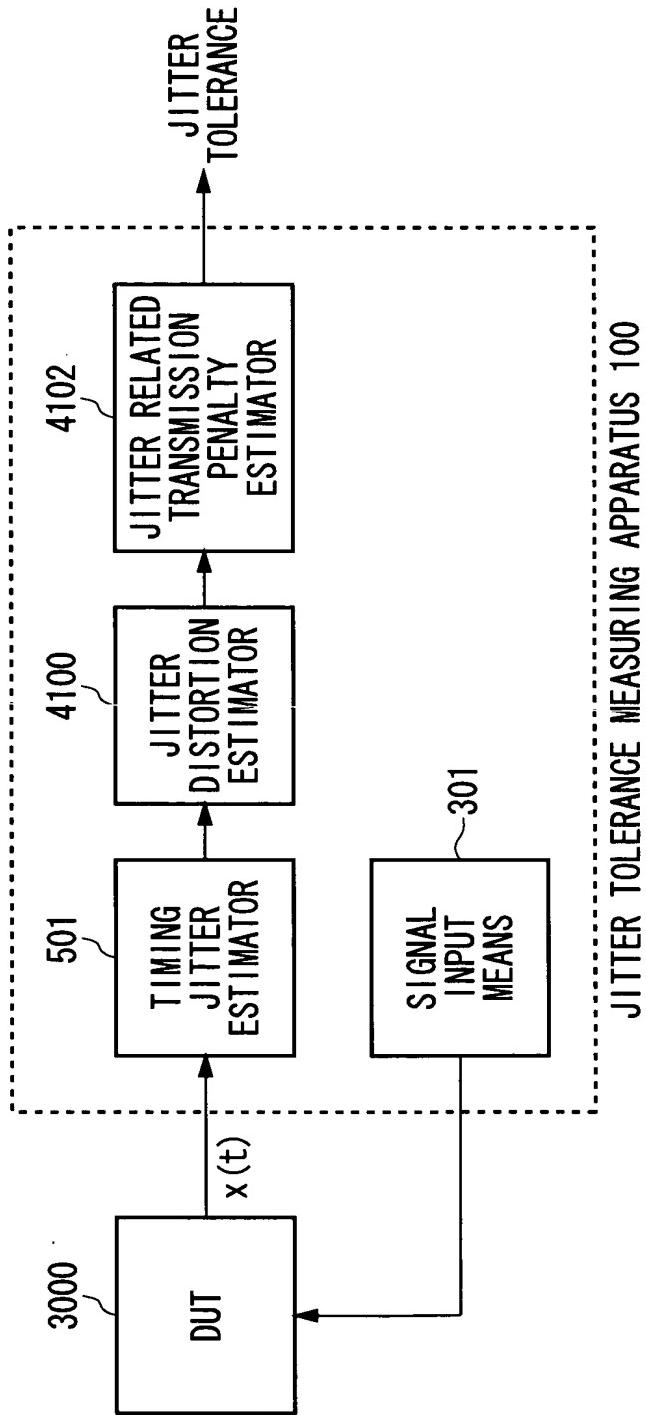


FIG. 63

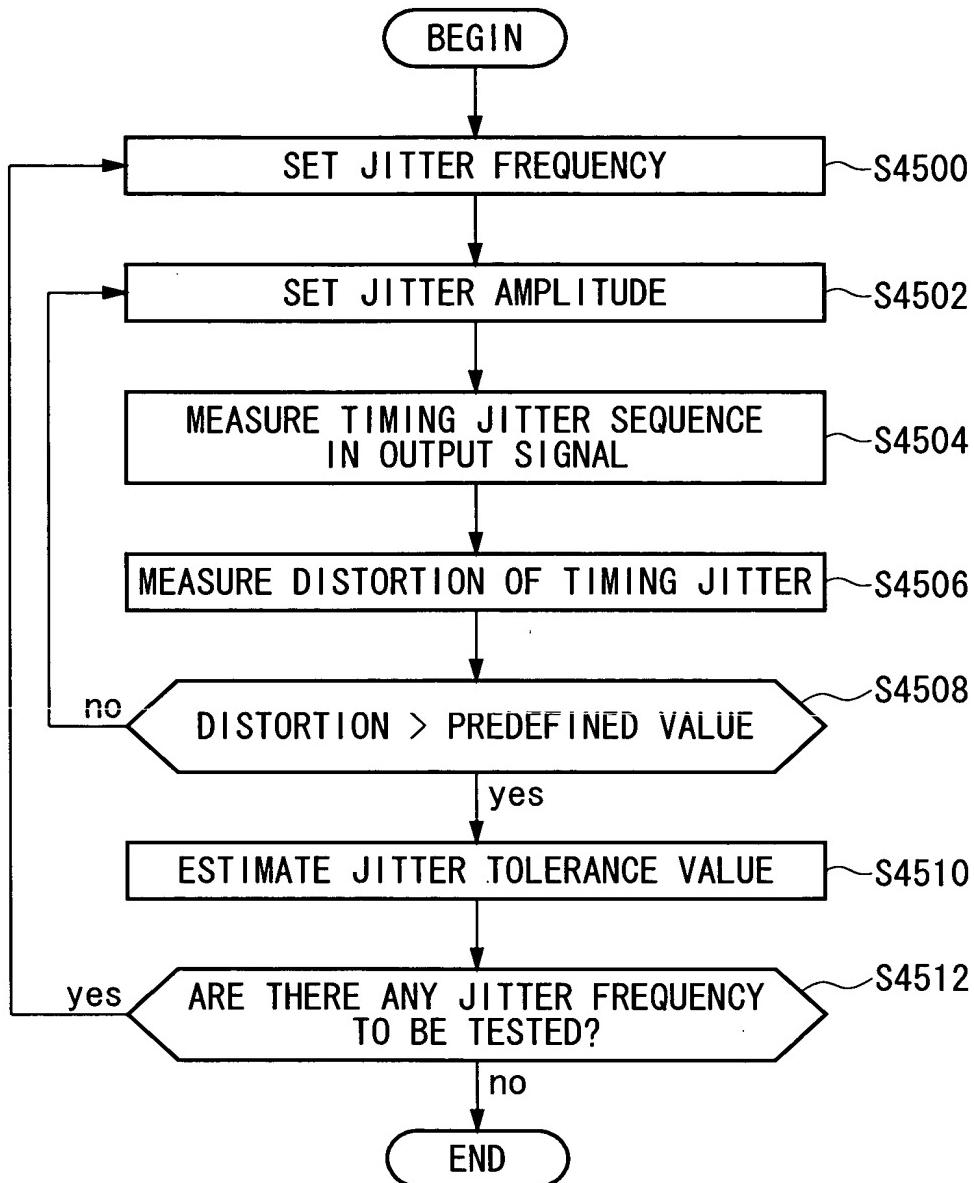


FIG. 64

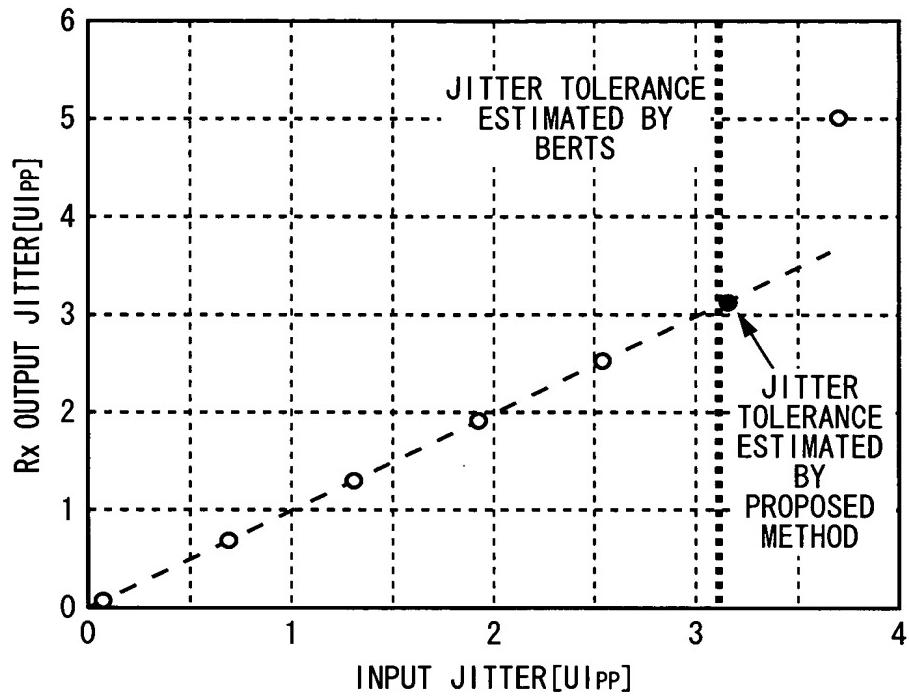


FIG. 65

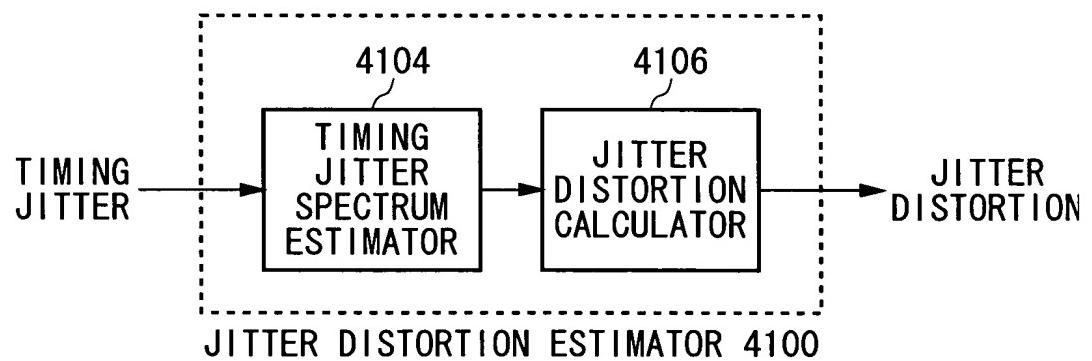


FIG. 66

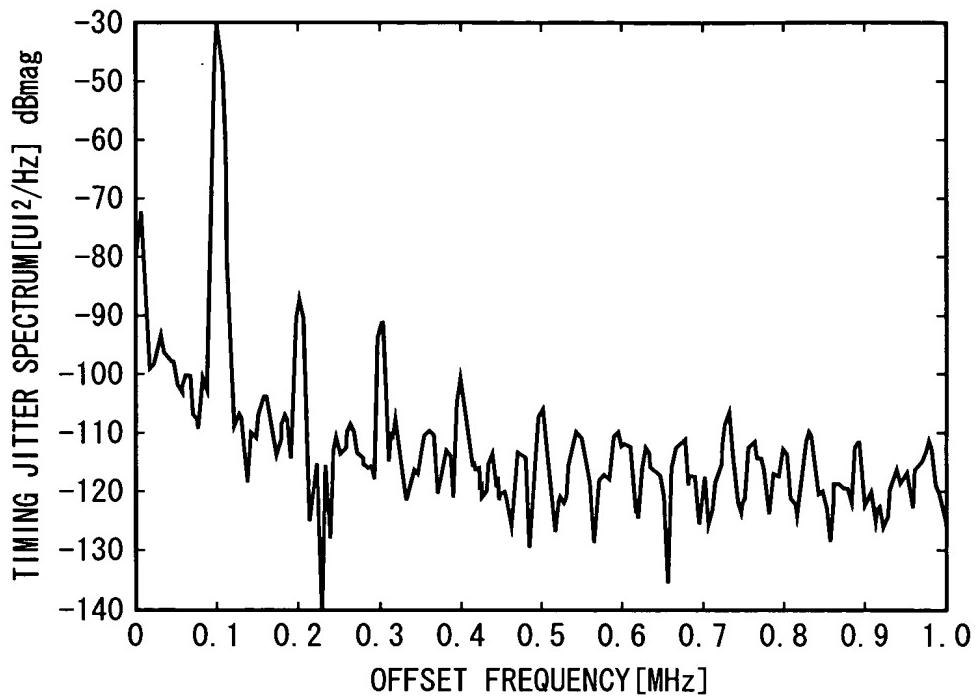
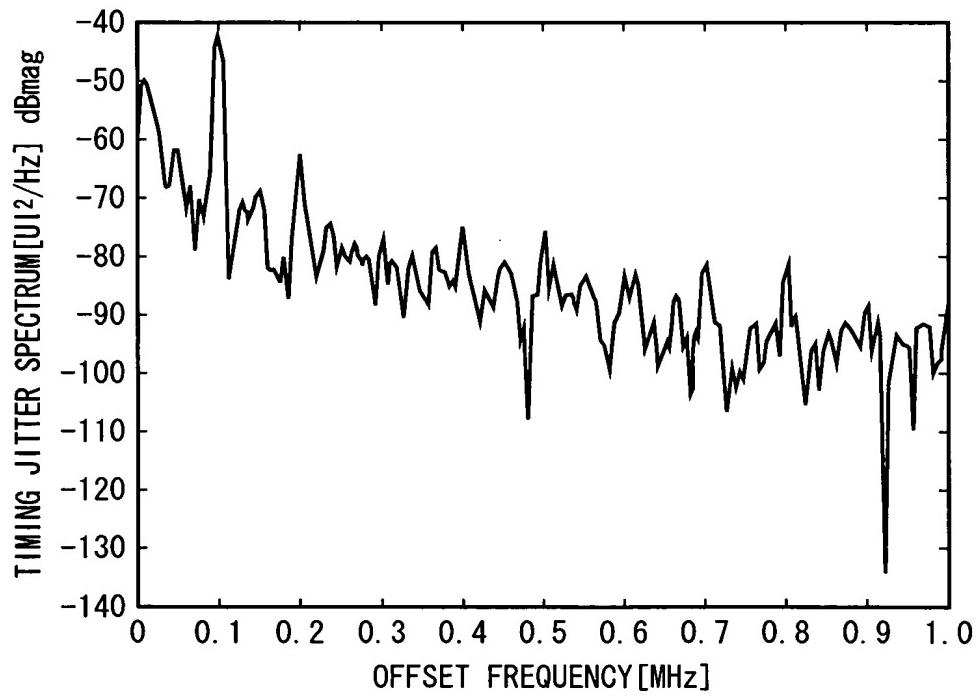


FIG. 67



51/58

FIG. 68

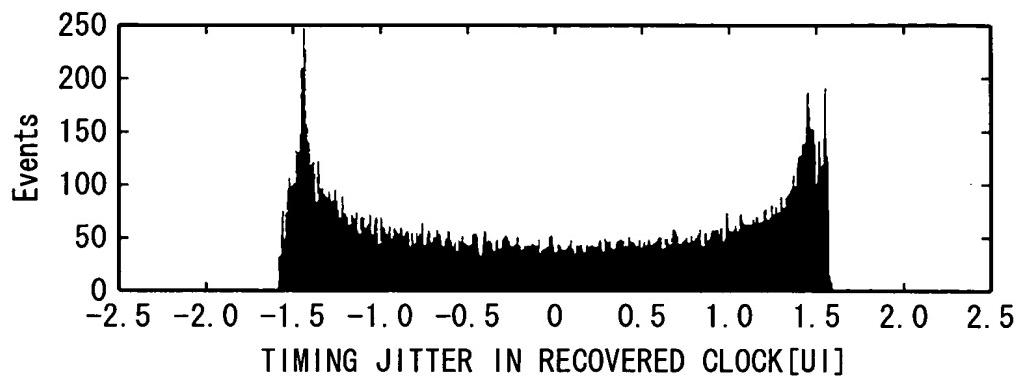


FIG. 69

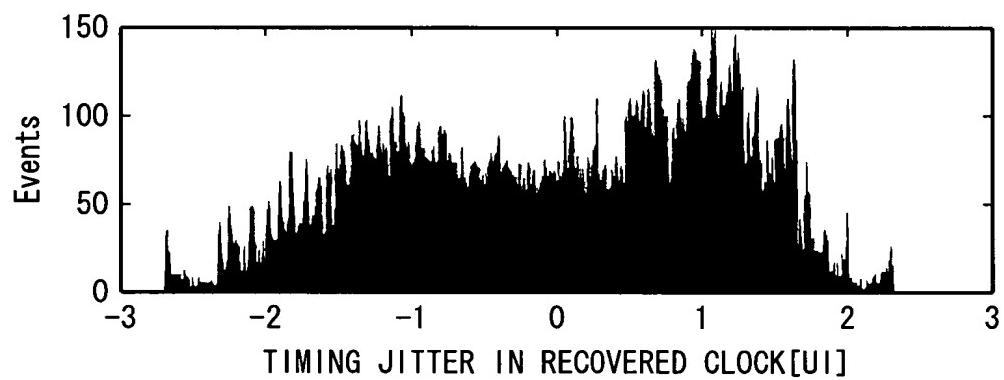


FIG. 70

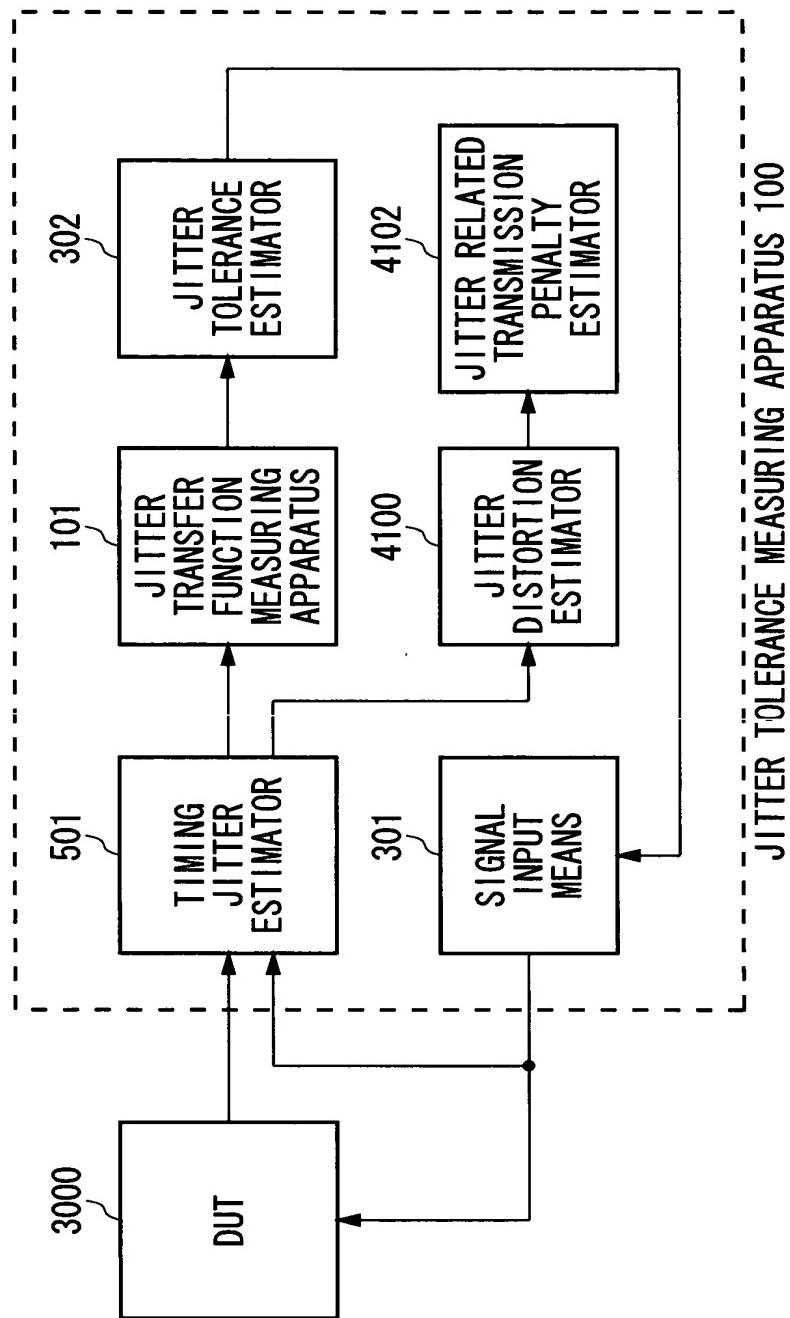


FIG. 71

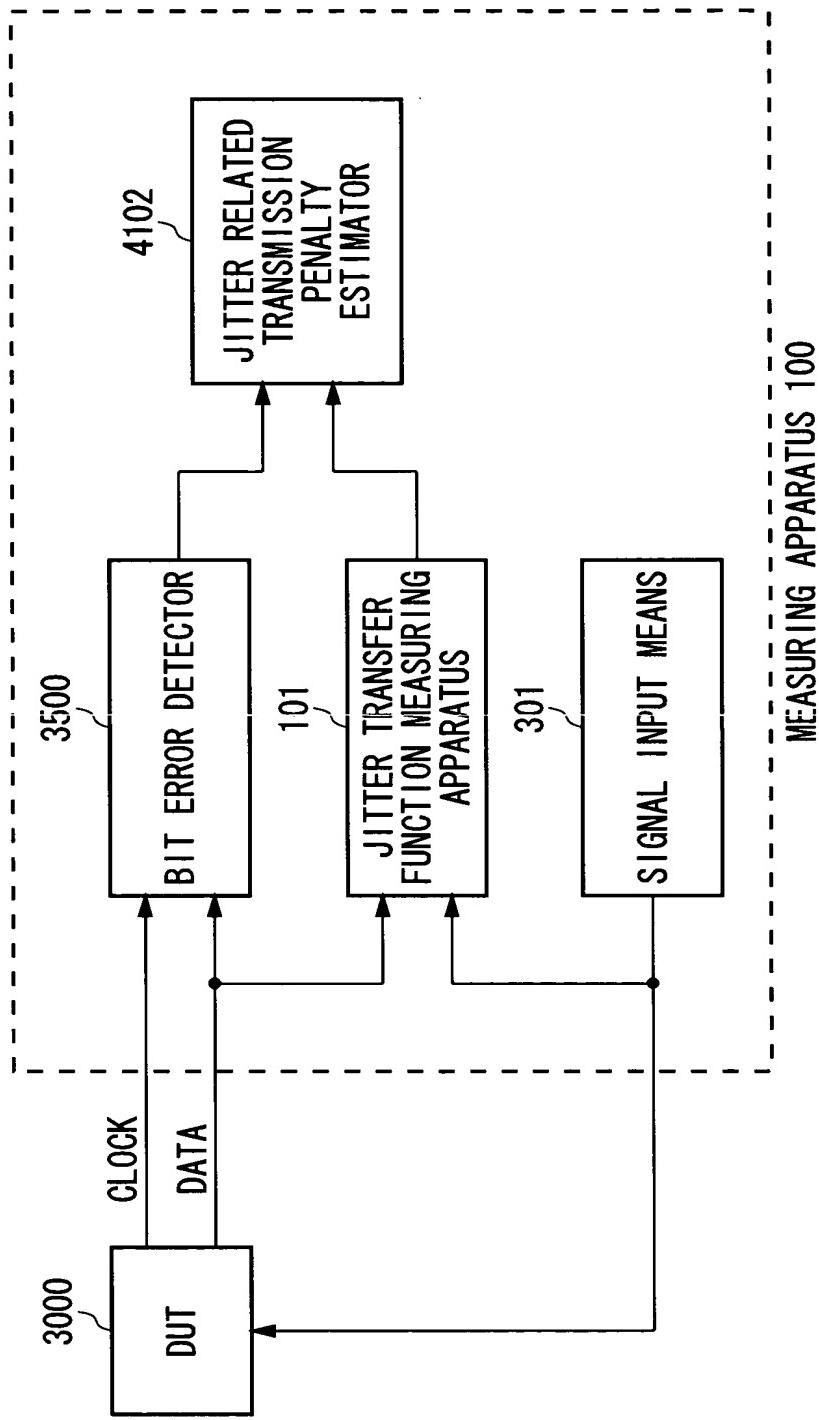


FIG. 72

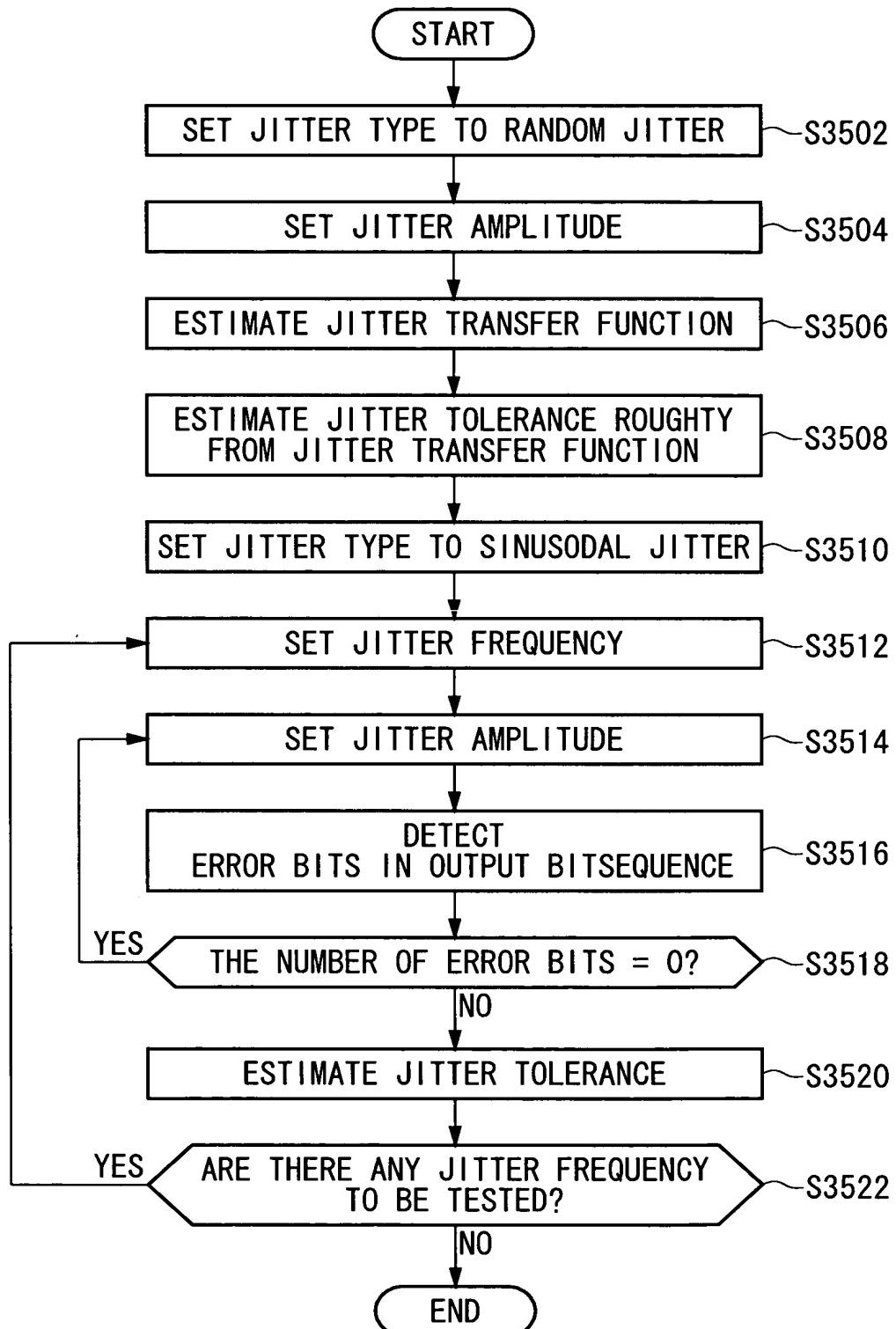
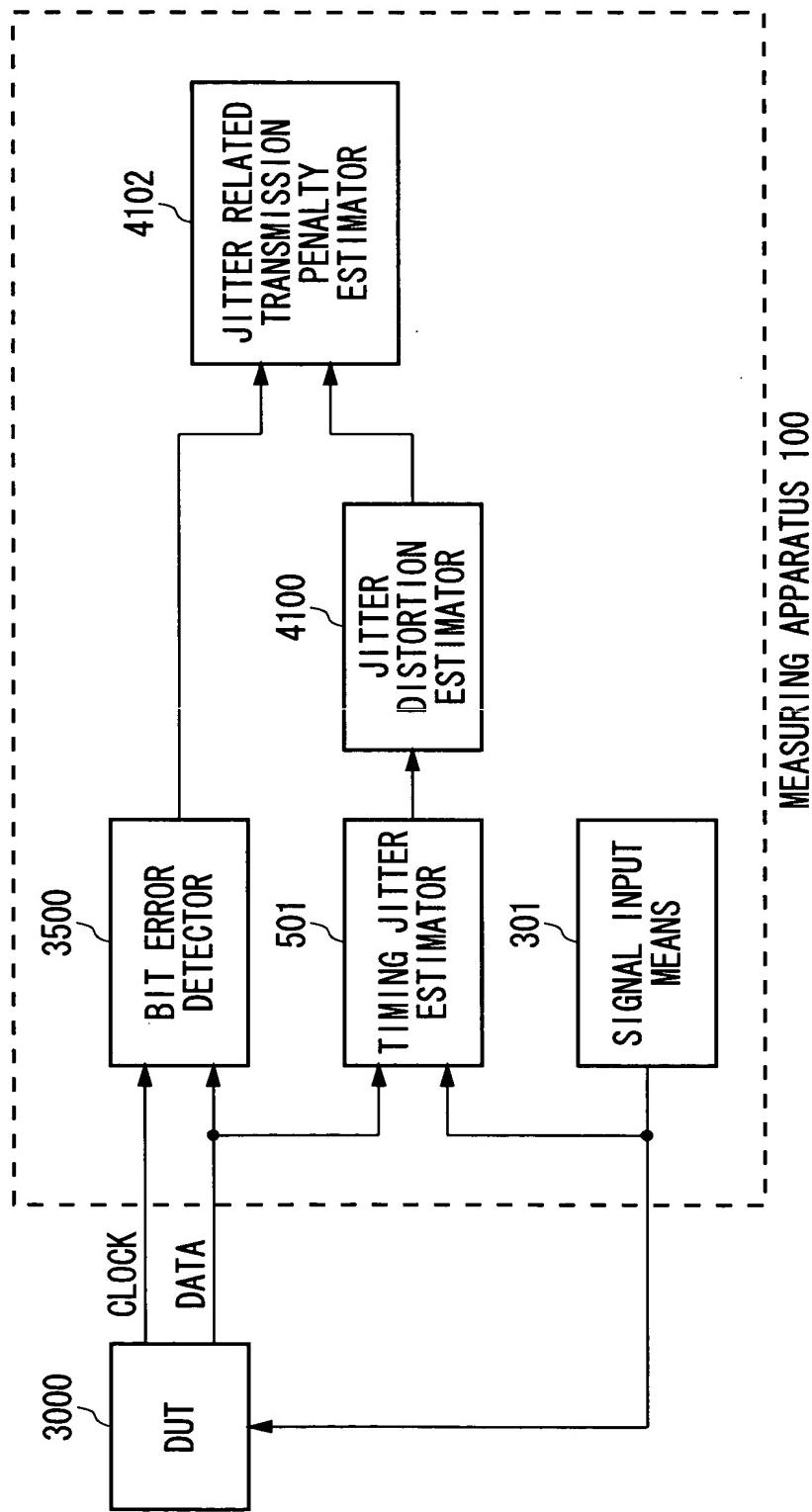


FIG. 73



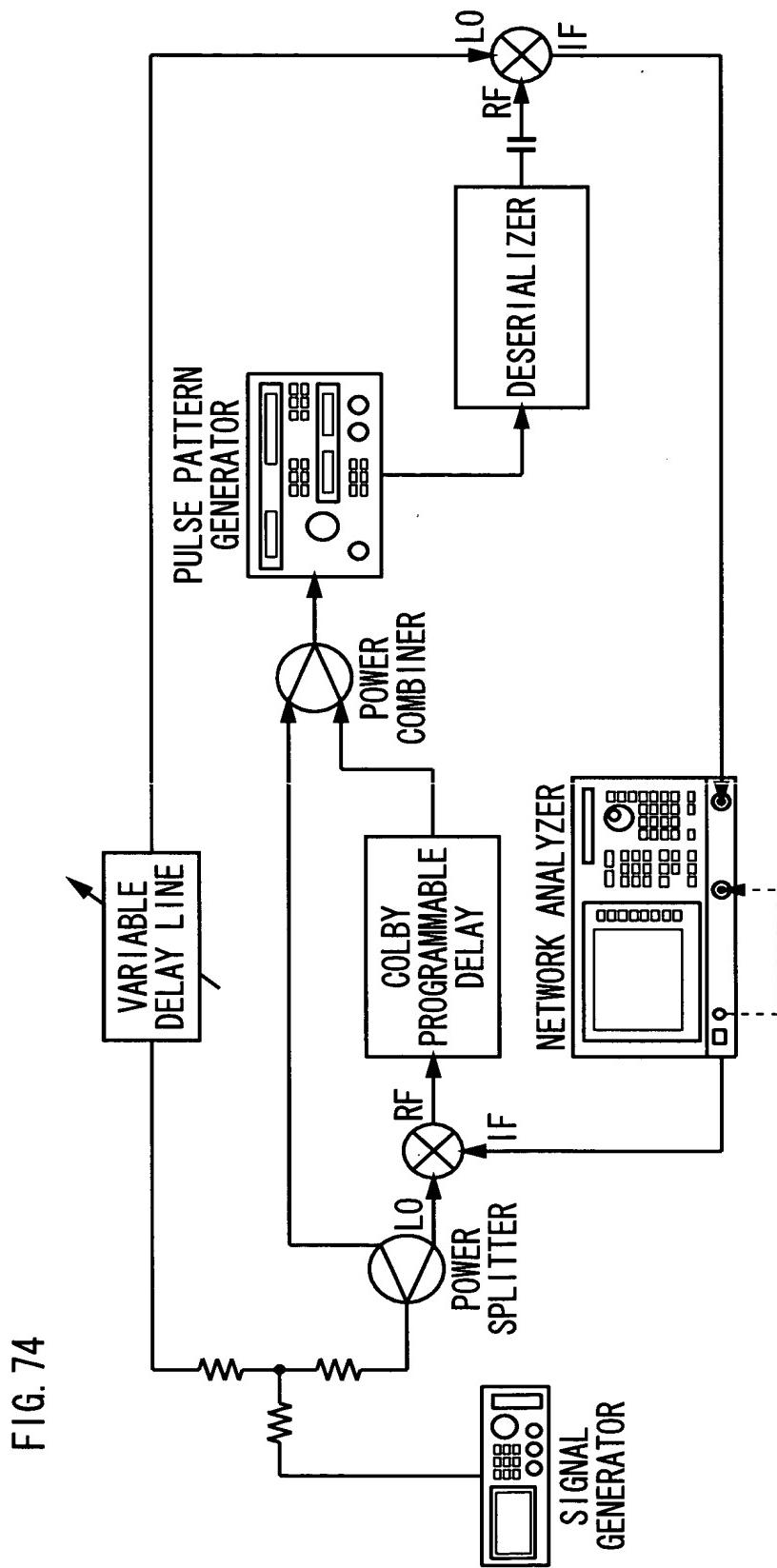


FIG. 75

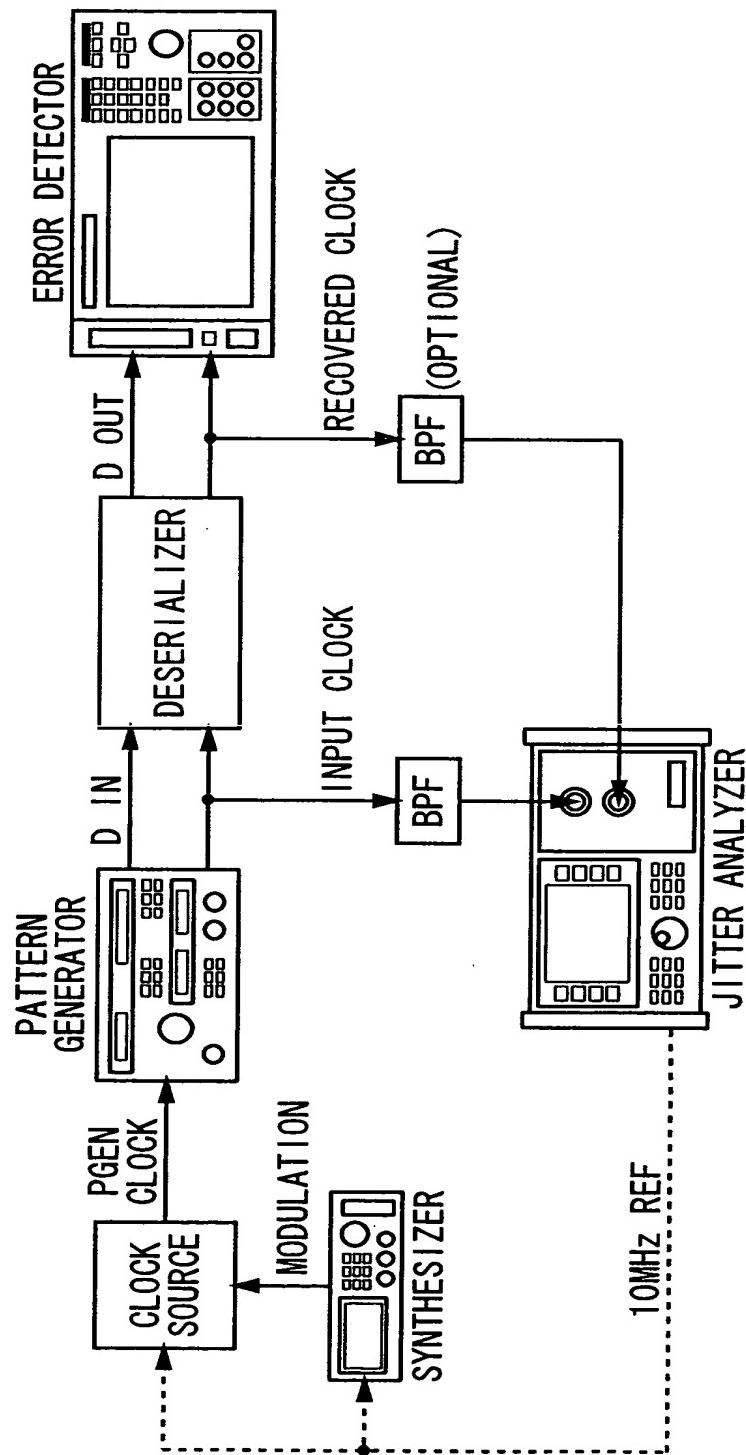


FIG. 76

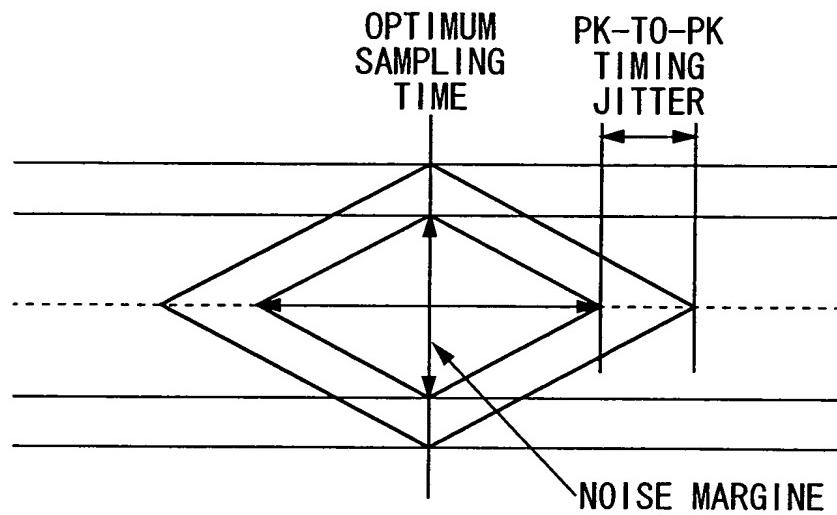


FIG. 77

